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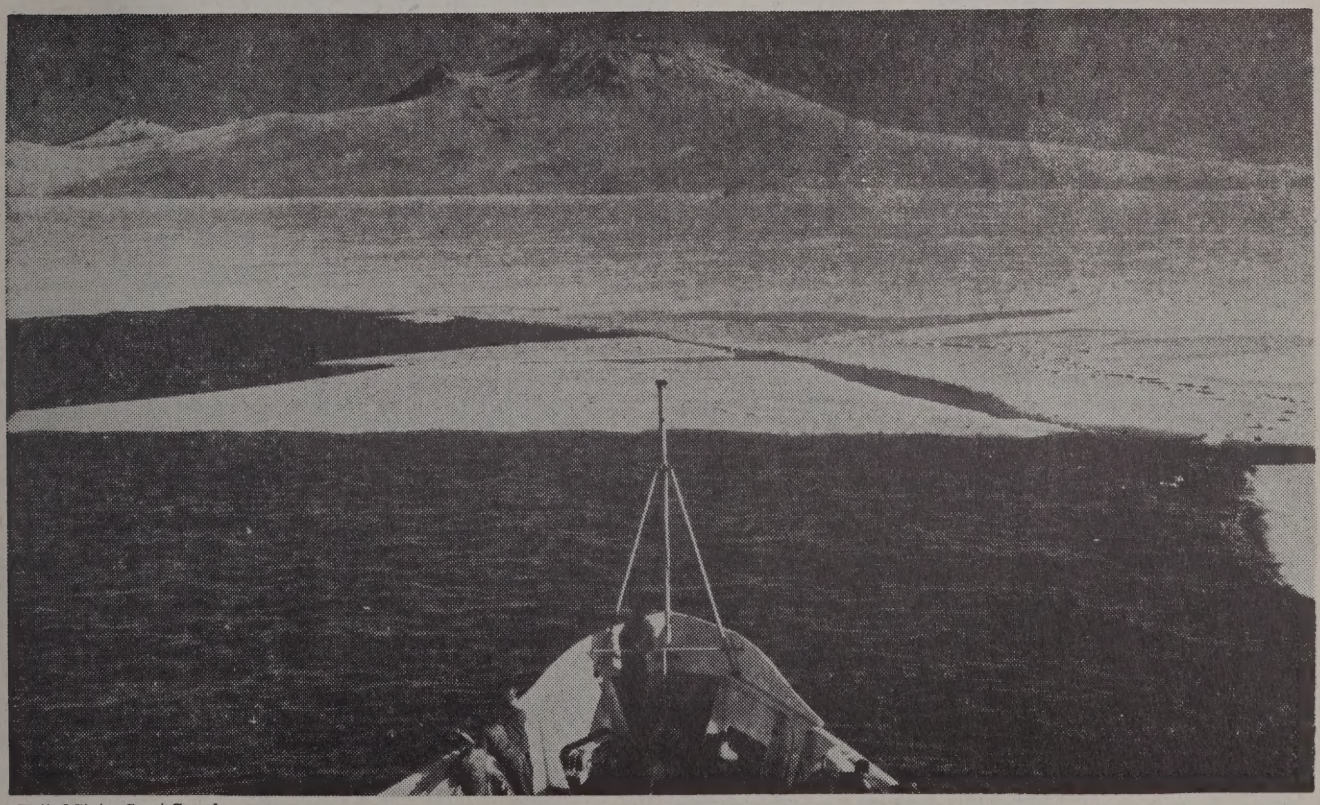
THE POLAR TIMES

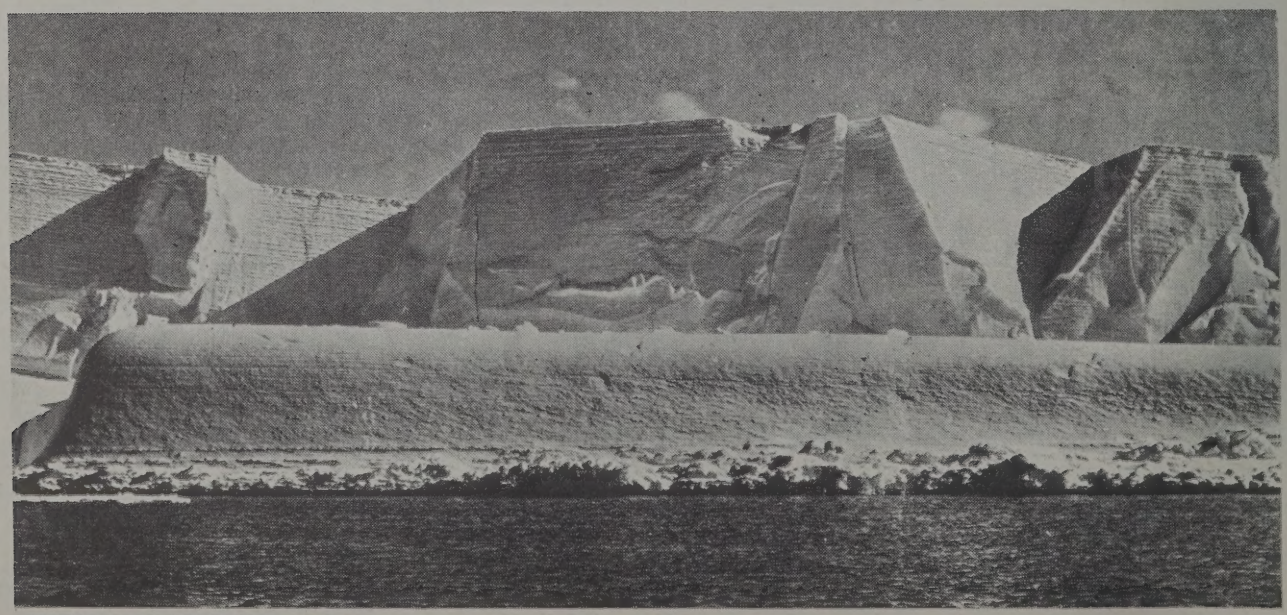


United States Coast Guard

What Icebreaker 'Eastwind' Saw on Antarctic Arrival

Crewmen of the Eastwind watch from the ship's bow as the Boston-based Coast Guard icebreaker heads into an ice pack of McMurdo Sound, with Mt. Erebus, 13,200 feet high, looming in the distance. The vessel is back in Boston after a 25,000-mile trek to the South Polar region in connection with setting up bases for International Geophysical Year studies.

SENIOR OFFICERS ABOARD THE ARNEB From left: Dr. Paul Siple, director of the scientific project, Major W. Wiener, aide to Admiral Byrd, Admiral Richard E. Byrd, in command of the American expedition, Captain S. Mandeville, aide to Admiral Byrd and chief of staff, Captain L. Smythe, officer commanding the Arneb, Commander G. K. Ebbe, officer in charge United States Antarctic air squadron. Captain Smythe said the return trip from the Antarctic base had been a good one. Official photographs U.S. Navy.



SECTION OF ICEBERG which blocks passage between Beaufort and Ross Island.

The Polar Times

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Trough in Antarctica Spawns Hurricane Winds

A 1,000-Mile Chute in Icecap Sighted by Americans

By ANTHONY LEVIERO

WASHINGTON, March 4—The current United States Antarctic expedition has discovered a vast trough of ice, thousands of square miles in extent, in which the vilest weather in the world is spawned.

Hurricane gusts up to 200 miles an hour have been clocked in the chute between Victoria Land and Wilkes Land. The everlasting glacial ice also slides through the trough into the Indian Ocean.

Word of the expedition's geographic discovery, one of the most important this season, has just been brought back here by Dr. Paul A. Siple, geographer and deputy to Rear Admiral Richard E. Byrd. Admiral Byrd is in over-all command of the country's Antarctic work as part of the world research of the International Geophysical Year 1957-58.

Dr. Siple, a veteran of all the Byrd Antarctic expeditions, also said recent observations supported his belief that the Antarctic continental icecap was divided into two gigantic domes of ice, with perhaps some smaller satellite domes scattered around in the still unexplored regions.

The smaller of the two domes covers Marie Byrd Land—the eastern Pacific sector of Antarctica—and has an altitude of about 10,000 feet. The larger dome lies in the vast region between Wilkes Land and Queen Maude Land—the Australia-Indian Ocean sector—where the altitude is estimated at 12,000 feet.

It might be more accurate to describe these domes as separate icecaps; and one objective of future seismological tests is whether they are merely gargantuan plateaus of ice or primeval mountains buried under the glacial blanket.

Apart from its importance as a geographic feature, the trough noted by Dr. Siple is significant for a number of reasons. It will provide data on the origin of winds that may affect weather in other parts of the world. Certainly the trough has a violent local effect on Antarctic weather.

And now new expeditions for the International Geophysical Year will know enough to stay out of the place and avoid the hardships suffered by the Australian Mawson Expedition of 1911-14 and the French expedition of 1950-53. Both of those groups had camped unwittingly at the bottom edge of the biggest air drainage ditch in the world.

"We got a little more of a peep into the Antarctic continent," said Dr. Siple, who flew once across the South Pole and once across the trough in his most recent trip. "The continent has this heaped-up dome we visualize as the Antarctic. As you get toward the center you find two lobes, one in the East Antarctic and one in the West Antarctic.

"The big section toward the Australia, Africa and Indian Ocean side is bigger, and goes up to quite a high elevation. We think of the continent as two, maybe more, gigantic icecaps. Until we get seismologists in there, we won't know whether they are great masses of snow over flat terrain or high terrain under the snow. There are no outcrops by which to tell.

"One dome is in Marie Byrd Land. There is some suggestion of a ridge in the Pole sector, which is at an elevation of 10,000 feet. The other is in Wilkes Land. Between them is a vast trough swept by violents winds."

Dr. Siple described the approximate boundaries of the great wind and ice chute. On one side the limit is the range of mountains, about 100 miles wide and with peaks up to 15,000 feet, that lies generally along the line of Long. 160 degrees E., the line of Victoria Land.

About 200 to 300 miles westward was discovered another high altitude formation, established by making radio altimeter observations from aircraft. On that side the wall of the chute was generally about 12,000 feet.

Between the two boundaries the ice slopes down to a floor at 7,000 to 9,000 feet—hence a relatively shallow ditch 200 to 300 miles wide. In length it may well exceed 1,000 miles. Its axis passes near the South Pole and is approximately parallel to the Queen Maude Range. Better estimates of its length will have to await aerial reconnaissance in the direction of the Weddell Sea.

The principle of the creation of the hurricane is simple. The colder air along the two high boundaries of the trough is continually slipping down, displacing the warmer air on the floor of the immense glacier track, creating turbulence and sweeping down in ever-mounting velocity to the ice-walled coast.

Sir Douglas Mawson, the Australian explorer, described what life was like on Adelie Coast at the bottom (the northern end) of the trough which was, of course unknown to him. On May 15, 1912, he said in his book, "The Home of the Blizzard," that "the wind blew at an average velocity of 90 miles per hour throughout the whole twenty-four hours." On May 24, he reported gusts that approached 200 miles an hour.

Diagonal shading marks area of the Antarctic trough

Siple Reports Gains by Byrd's Flights Over Polar Area

Admiral Byrd Cites Results

WASHINGTON, March 13—Rear Admiral Richard E. Byrd said today his recent naval expedition had explored more than 800,000 square miles of the Antarctic continent by air. He added there still remained an area of 2,200,000 square miles never seen by man.

The Antarctic veteran has just returned from the operation that began the task of establishing bases for the International Geophysical Year, 1957-1958, in which scientists of forty-five nations will simultaneously observe terrestrial phenomena in all parts of the world.

The admiral reiterated that the United States reserved all its rights in Antarctica, made no claims and recognized no other country's claims. The State Department is soon to begin to formulate a national policy on the issue of occupancy, he added.

U. S. PLANE MAKES SOUTH POLE VISIT

Third Such American Flight Takes Place When Party's Original Plan Is Thwarted

WASHINGTON, Jan. 4.—A Navy plane flew over the South pole yesterday.

This was the third flight of United States aircraft over that Pole. A combined crew of Marines and Navy men in a Navy transport plane circled the pole for thirty minutes at an altitude of 500 feet.

Lieut. Col. H. R. Kolp of Akron, Ohio, the commander of the R5D four-engine transport, reported the unscheduled polar flight after he had been forced by foul weather to abandon an exploratory mission.

Colonel Kolp reported today to officials here that the landscape at the pole was flat with gentle elongated snow drifts giving the area the appearance almost of a white stationary sea with moderate swells.

Using the Douglas transport plane's instruments, Colonel Kolp recorded the elevation of the South Pole as 9,700 feet above sea level. In taking the altitude the plane flew at 11,500 feet and the instruments showed the surface to be 1,800 feet below.

After that, the plane descended to 500 feet and the crew tried all available means to leave a marker. Two aviation smoke bombs, lamp black, a die marker, ink and a large piece of cardboard were dropped at the southern extremity of the earth's axis. None of these markers proved discernible when the plane was at a distance.

This led the plane commander to deduce that the snow over the pole was very fine and powdery and of very light density. In other words, a marker was quickly covered up or blown away.

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AUGUST HOWARD, Editor

THE POLAR TIMES highly recommends "The Polar Record," published by the Scott Polar Research Institute, Cambridge, England.

The American Polar Society was founded Nov. 29, 1934, to band together all persons interested in polar exploration. Membership dues are one dollar a year, which entitles members to receive THE POLAR TIMES twice a year.

Back issues are 50 cents each. Bound volumes, covering five years, are $8.00 each.

Lieut. Col. H. R. Kolp, who was the commander of the R-5D four-engine transport.

The flight to the pole was fortuitous. The air crew had been assigned from the camp of Operation Deepfreeze in McMurdo Sound to make a deep exploration flight over Wilkes Land. That region of the coast of Antarctica lies roughly along the Antarctic Circle south of Australia from about 102 degrees East 1,500 miles to 151 East.

McMurdo Sound is on the west side of the Ross Sea about 800 miles from the Pole. Wilkes Land is northwest of McMurdo Sound.

The plane encountered a severe "whiteout" on its initial course and Colonel Kolp was forced to change his plan. A whiteout is a combination of overcast sky and completely snow-covered terrain that makes it difficult or impossible to discern terrain features and any horizon. Navigation is difficult in such a situation; and planes in the Antarctic have run into mountains in a whiteout.

The plane, which is attached to the naval expedition under Rear Admiral Richard E. Byrd, thereupon explored an unknown area from Long. 145 degrees East and Lat. 80 degrees South to the Pole. This is roughly on the east side of the Ross Sea.

Admiral Byrd made the first flight over the South Pole in his 1929 expedition, and he was aboard one of two planes that made the second flight during Operation High Jump in 1946.

The present expedition is establishing bases and making preliminary explorations in preparation for United States participation in the International Geophysical Year 1957-58, when approximately 5,000 scientists of forty-four nations, including some of the Communist bloc, will join in a cooperative study of the earth sciences.

The crew members with Colonel Kolp were first pilot, Lieut. Comdr. H. G. Hanson of Toscola, Ill.; Maj. F. J. Helling of New York; Lieut. R. R. Mackell, second pilot and navigator, of Grover, Pa.; chief photographer, W. C. Aslin of Everett, Mass.; Chief Aviation Machinist Mate J. K. Wheeler of Birmingham, Ala.; J. J. Riley of St. Louis, aviation electronics technician 2/c, who was radioman, and Photographer's Mate 1/c T. R. Kiley of Pueblo, Colo.

Navy Raises U.S. Flag Over Little America V

By BERNARD KALB

LITTLE AMERICA V., Antarctica, Jan. 4—Five acres of Antarctic ice were dedicated today as Little America V, site of the major United States base in the South Polar program of the International Geographical Year.

Today's flag-raising briefly interrupted the job of converting the barren area of ice into a community of seventeen prefabricated houses. From here, 800 miles from the South Pole and 12,000 miles from home, the United States personnel will launch many scientific exploratory and mapping operations during the next three and a half years.

Operation Deepfreeze, of which these activities are a part, is designed to increase acquaintanceship with the world's least known 6,000,000 square miles.

The temperature was 38 above zero Fahrenheit, at the time of the ceremony at 10 A. M. Congratulary remarks were made to a group from the seventy-six men who will winter here this year by Rear Admiral Byrd and Rear Admiral George J. Dufek, commanding Task Force 43, the Navy force in Operation Deepfreeze.

"The base is here to serve science as well as Uncle Sam in exploration," said Admiral Byrd, adding that Deepfreeze "marks the beginning of opening of a new continent."

Little America V is about thirty miles east of Little Americas I through IV, the sites of bases on the four previous Antarctic expeditions led by Admiral Byrd. Those bases, in the Bay of Whales area west of here, are almost completely entombed by snow and the Bay of Whales harbor has gone in the breaking of the shelf ice. The region of Kainan Bay has a good harbor.

According to Comdr. Herbert H. Whitney of Arlington, Mass., head of the Seabee construction battalion, all the buildings of the base here will be up by March; men would begin living in the area in the next two weeks. The ships now in Kainan Bay—the icebreaker Glacier and the cargo ships Arneb and Greenville Victory—will all be out by about Feb. 15. Ships will return next December, when Phase 2 of Deepfreeze gets under way.

The site is at Lat. 78:12 degrees S., Long. 162:30 degrees W. About 400 miles to the west is the Ross Island base of the expedition at McMurdo Sound.

The Glacier, lead ship of Deepfreeze, yesterday almost became the first ship to sail into the mouth of Sulzberger Bay to the east of Ross Sea. The icebreaker went through relatively uncharted waters studded with hundreds of huge bergs and reached about Lat. 76:45 degrees S., Long. 152 degrees W.

Admiral Byrd, who was aboard, expressed the belief that his ship, Bear of Oakland, reached a more southerly point in 1940. Admiral Byrd back in 1929 on his first expedition discovered Sulzberger Bay, a 100-mile wide indentation into Marie Byrd Land. Since then, the pack ice has prevented entry into the bay.

U. S. Navy Tractor Driver Lost

WASHINGTON, Jan. 6 (AP)—A tractor being used in Antarctic exploration went through a crack in the ice and carried the driver to his presumed death, the Navy reported today. It was apparently the first fatality of this year's United States expendition of about 1,800 men.

A message received from the expedition party at McMurdo Sound in the Ross Sea area said that Richard Thomas B. Williams, driver 3/C, was "presumed dead" after the tractor he was driving disappeared beneath the ice.

He was the son of Mrs. Elizabeth Williams, of Ilion, N. Y. He was a member of the special mobile construction battalion assigned the duty of blazing trails and laying out runways at McMurdo Sound.

The Navy report said that the accident occurred about twenty feet from a bridge that had been constructed over an ice crack and that the tractor with Driver Williams had crossed the bridge just before the ice opened beneath him. The depth of water at this point beneath the ice is about 600 feet, the Navy said.

Earlier today Operation Deepfreeze in the Antarctic reported that military scientists had "overcome the greatest threat" to trail blazing in polar regions by testing an Army engineer's crevasse detector at Little America V. The Navy said the scientists had found the detector "100 per cent successful."

10-MILE BERG MET ON ANTARCTIC RUN

U. S. S. Glacier in Ross Sea Encounters Floating Ice Bigger Than Manhattan

ABOARD U. S. S. GLACIER, off Ross Island, Antarctica, Jan. 5—The Antarctic treated this Navy icebreaker today a to spectacular sight, a flat-topped iceberg more than three times the area of Manhattan's 31.2 square miles.

The Glacier, on a journey from Kainan Bay to McMurdo Sound was steaming along 500 feet off the Ross Shelf Ice when, about 3:45 P. M., a man on the bridge shouted, "It looks like an iceberg up ahead."

The seven ships of Task Force 43, the Navy's arm of the United States Antarctic undertaking, Operation Deepfreeze, all have passed icebergs during the last few weeks. But these icebergs turned out to be tiny in comparison with the one seen today.

According to the ship's quartermasters this berg measured at least ten miles by ten miles. The cliff was 150 feet high and scholars studying the ice estimated that the berg extended 900 feet below water.

All that ice blocked the eleven-mile opening between Ross Island and Beaufort Island on the north. The berg forced the Glacier to run around Beaufort to reach the expedition's camp at McMurdo Sound. The sound is between Ross Island and the continental coast on the west side of Ross Sea.

The berg was framed on the land side by Mount Erebus, 13,200 feet of active volcano, and Mount Bird, an extinct crater of about 5,600 feet.

Dr. Paul Siple, director of scientific projects of Deepfreeze, who is on his fifth expedition here with Admiral Byrd, said after a helicopter flight over the berg, "It's a big one all right, the biggest I have ever examined."

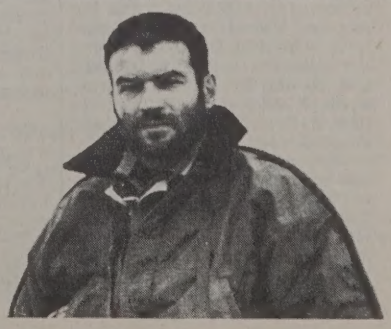
The U. S. S. Atka on a reconnaissance mission a year ago discovered that a section of the Ross Shelf as large as Long Island had broken off and gone to sea.

The temperature was a warm 33 degrees, and the Glacier's men worked cameras without gloves at the berg.

According to the Navy's Sailing Directions for Antarctica, the largest iceberg reported seen was about 130 feet high and about 100 miles long and 100 miles wide. It was seen in 1927 by a whaler off Clarence Island in the South Shetlands.

IN THE ANTARCTIC—A Navy P2V "Neptune" patrol plane is being refueled in typical filling station style from the USS Nespelen during a flight operation, top photo. A trail-blazing party is preparing to leave Little America V for Marie Byrd Land, 600 miles away, center Several members of the group, part of Operation Deep Freeze, survived a crash landing in the Antarctic. Below, Little America V appears to be a busy place as Seabees and scientists ready the camp preparatory to spending long, cold months in the Antarctic.

Bernard Kalb has worked for The New York Times since 1946. He has been a general reporter and rewrite man. Last October, smooth-shaven, he left Times Square for Antarctica. Five months later, ready for the trip home, he looked the part of a veteran Antarctic explorer, beard and all.



All press dispatches in this issue from "Operation Deepfreeze" are by Bernard Kalb except those otherwise credited.

ANTARCTICA SEES AVIATION HISTORY

U.S. Expedition Makes Trip of Record Length and Finds 2 Ranges of Mountains

AT McMURDO SOUND BASE, Antarctica, Jan. 6—The current United States aerial exploration program in the Antarctic has so far embraced a flight over the South Pole, the discovery of two lofty mountain ranges and a 2,900-mile round-trip flight between McMurdo Sound and the Knox Coast.

The first of these exploring flights began Tuesday and the third ended this morning, when a two-engine Neptune returned to the ice runway here after having made the longest flight in Antarctic history. Almost all the 7,245 miles were logged by three planes, all of which had made a 2,550-mile non-stop flight from New Zealand twenty days ago.

In short, the continent of 6,000,000 square miles had its greatest four days of aviation since Sir Hubert Wilkins first flew in the Antarctic in 1928.

Two of the flights took the Navy men within sight of areas in which the Soviet Union plans to establish two of its stations in connection with the International Geophysical Year 1957-58. The pilots said they did not see anything at either site. They added that it was a coincidence that the filghts had taken them within sight of those places.

Another Skymaster, flown by Lieut. Comdr. Henry P. Jorda of San Francisco, reported the discovery of the two mountain ranges and a plateau 13,000 feet high. Exploring a 130-mile-wide belt extending from McMurdo Sound to Long. 90 degrees E. roughly along Lat. 80 degrees S., he found the northern end of a range, with peaks between 7,000 and 10,000 feet, at Lat. 79 degrees S., Long. 156 degrees E. The range was about thirty miles wide and extended fifty miles to the south.

The second range was sighted at Lat. 79 degrees 30 minutes S., Long. 151 degrees E., and extended to the southeast. The range was sixty miles wide, with peaks up to 12,000 feet. The big surprise, Commander Jorda said later, was that the icecap along the ninetieth meridian between Lat. 80 and 82 degrees S. averaged 13,000 feet in altitude. He flew 2,115 miles in thirteen and a half hours.

The longest flight of the three was made in the Neptune, piloted by Lieut. Comdr. John H. Torbert of Carmel Valley, Calif. He and a six-man crew flew from McMurdo Sound direct to Vincennes Bay, on the Knox Coast, at Lat. 66 degrees 45 minutes S., Long. 108 degrees E. He then flew West and looked over about 120 miles of coast, going north of the Antarctic Circle in the process.

During his fourteen-and-a-half-hour flight, Commander Torbert found that the icecap averaged about 11,500 feet in height. He reported that the area, never before seen by man, was "flat—there is nothing there but snow." He added: "It all was very boring and there was nothing to see." He said he had less than two hours' fuel in his tanks when he returned from the 2,900-mile flight.

The fliers were aware of the hazard. Commander Jorda said: "We figured it would take us at least 100 days to walk out if we were forced down. No big plane could land here for rescue and get off again—the air is too rarified to provide buoyancy. To be frank, we probably never would have got out despite all our survival gear if we went down there."

ANTARCTIC SURVEYED: American planes spotted two uncharted mountain ranges (1) and explored the Vincennes Bay area (2) in addition to flying over the South Pole (3).

Crippled Plane Reaches Base

AT McMURDO SOUND BASE, Antarctica, Jan. 7—A Navy plane landed here today on one engine after its other engine had failed.

The Neptune, with six men aboard, was exploring an uncharted area of Wilkes Land, 1,250 miles from the ice runway here, when one engine suddenly began spluttering. The crew jettisoned 5,000 pounds of equipment to lighten the load. The engine finally died twenty minutes from the base.

"We didn't expect to get back when the engine began cutting out," said Lieut. Comdr. Joseph Entrikin of West Chester, Pa., plane commander. "We thought that with a tailwind we might make a few hundred miles—close enough to be found. We were flying at about twelve and a half thousand feet when trouble developed, or about one thousand feet over the icy plateau."

The story of the Neptune's close call began with Commander Entrikin flying to Lat. 73 degrees 20 minutes S. Long. 99 E. His mission was to explore an area never before seen, and he made a swing to the left at that point to look over a 120-mile stretch. But, after he had gone only forty miles, the engine trouble developed.

Byrd Makes Third Flight Over South Pole

AT McMURDO SOUND BASE, Antarctica, Jan. 8—Rear Admiral Richard E. Byrd, a frequent visitor to the South Pole, flew over it again today—his third flight over the Antarctic end of the world since 1929. The second flight was made in 1947.

Today Admiral Byrd, who commands the United States Antarctic program, circled the Pole for fifteen minutes in a four-engine Skymaster. He dropped a United States flag on the icy plateau, which is 9,750 feet high. Ten other men on the plane dropped four other flags and four pennies "for good luck."

The flight also carried Admiral Byrd deep into the unknown of Antarctica—a region never before seen—at Lat. 85 degrees S., Long. 90 E.

This is the general area Admiral Byrd has called the Pole of Inaccessibility. It is roughly in the center of the roughly round continent of 6,000,000 miles.

Yesterday another Skymaster flew over the South Magnetic Pole for what is believed to be the first time. The Magnetic Pole was found at Lat. 71 S., Long. 140 E.

McMurdo Sound in the Antarctica, Jan. 9 (AP)—Rear Adm. Richard E. Byrd has made his first flight of the current Antarctic expedition over the South Pole and the unexplored heartland area inside the Antarctic Circle.

Yesterday's flight took 11 hours, the round trip covering about 2,200 miles. The 67-year-old admiral said the trip was a "little tiring," but he felt fine.

Also aboard the Navy version of a DC4 aircraft was Dr. Paul Siple, the expedition's scientific director who will head the polar base next winter. The plane was flown by Lt. Cmdr. Henry P. Jorda of San Francisco and Lt. Cmdr. John Donovan of Buffalo with a six-man crew.

When the plane took off, it was not scheduled to fly to the geographic pole, but rather to a distant point in the interior at latitude 82 degrees south, longitude 40 minutes. A heavy overcast, icing and threatening weather stopped the plane 360 miles short of its original destination and the fliers turned south and headed for the geographic pole.

BIG WHALE OIL USERS

Dutch Consume Average of 7 Pounds a Person Annually

The Netherlands is the world's leading consumer of whale oil, according to the United Nations Educational, Scientific and Cultural Organization. Average annual consumption is seven pounds a person.

The Danes use an average of six pounds and the British slightly less. Whale oil is used mainly in margarine, soap, cosmetics and other products.

South Pole Just a Blur From Plane

Deflection of Light Causes a Whiteout Cutting Visibility

The following is a pooled dispatch by Saul Pett, correspondent for The Associated Press, on a flight over the South Pole.

ON SOUTH POLAR FLIGHT, Jan. 13—It is 7:28 P. M., New Zealand Time, (2:28 A. M., EST). A minute ago we were flying south. Without changing course, we are now flying north. Eighteen hundred feet below us lies the precise bottom of the world, from which all directions are north.

This is 90 degrees south latitude — the South Pole.

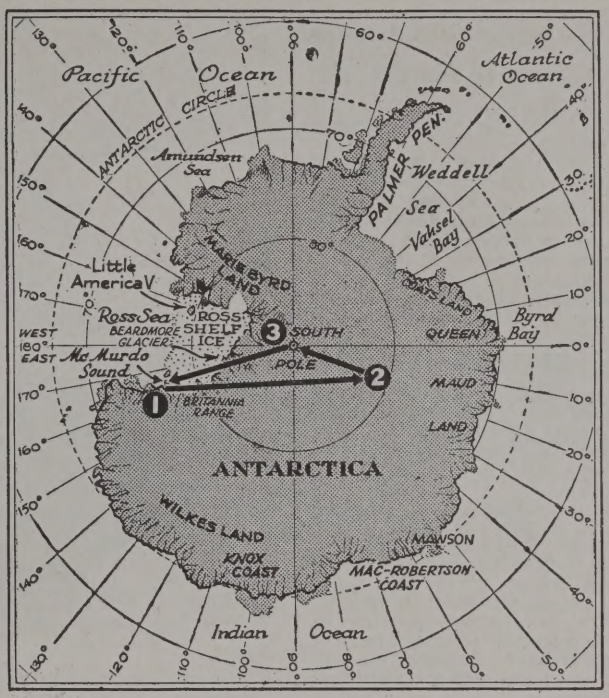
We have just completed a circle of five miles' diameter. There are ten of us aboard the plane, nine base fliers of Operation Deepfreeze and a correspondent. For most of the crew of the four-engine Skymaster, this is their second flight over the pole in eleven days. Fewer than forty men have been here before us.

All that the correspondent can see below, above and to the left and right of the orange-tipped wings is a dirty white blur. This is a whiteout, the Antarctic trick of refraction by which light bounces off billions of minute ice particles. It brings zero visibility.

"Don't feel bad," says the plane commander, Lt. Col. Hal R. Kolp, a Marine pilot from Akron, Ohio. "You didn't miss anything. The pole is exactly like the rest of the dull, flat snow-covered plateau we have been flying over all day."

The pole was reached on the return leg of a long, tiring flight of exploration deep into the unknown heartland of the Antarctic. The plane took off from the McMurdo Sound base, headed toward Queen Maud Land, reached a point 550 miles beyond the pole at Lat. 82 degrees S., Long. 20 degrees E., turned left and headed for the pole on the homeward journey.

We are now twenty minutes away from the pole and still in the whiteout. We are still 900 miles from base and we have been burning gas heavily all day fighting headwinds and overcasts and whiteouts. We are flying at an altitude of 11,000 feet above sea level, but the radar shows a high polar plateau only about 1,500 feet below us. Nobody aboard seems worried by the whiteout.



A U. S. plane flew an approximate course from McMurdo Sound (1) to a point (2) northeast of the South Pole, turned left, went to the Pole (3) and returned to its base.

Except me. Keep thinking what had been told me many times, that if the plane were forced to land on a high plateau our chances of survival would depend largely on our ability to walk. But Rear Adm. Richard E. Byrd, who has flown over the pole three times and heads the present Antarctic program, once said:

"Don't worry, if forced to land, we will come and get you somehow."

At one point, Colonel Kolp said, "We will have to go easy on the oxygen since the supply is short."

At the takeoff, halfway down the runway the plane bounced on an ice crack, then leaped forward as the jet booster bottles went off with a roar. As the wheels pulled up, a small thought occurred to me—this is Friday the 13th.

Soon we were flying at 9,000 feet with the blue-white mammoth Ross Sea ice shelf on our left.

On the right were the brown and black peaks of the Brittania Range about 13,000 feet high, sticking up from the snow. Glaciers fill valleys and stretch between peaks like a taut bed sheet.

The music of Benny Goodman and Dixieland jazz came over a tape recorder, piped into the plane over the loudspeaker system.

By 11:20 A. M. we were climbing glaciers of the coastal mountains and one could feel the effects of the thin air in the non-pressurized plane. It was an effort to move much.

A flat white plateau was spread out under us in all directions with good visibility up to 200 miles. The only features were the shadows of tiny snow hummocks. The plateau was rising steadily as we continued at 11,000 feet but the snow plain was now only 700 feet below.

At 1:20 P. M. we had climbed to 11,500 feet and the plateau was 800 feet below, which meant that we climbed 500 feet to gain 100 feet.

At 5 P. M. we reached the assigned end of the point of mission at Lat. 82 degrees S., Long. 20 degrees E. Here, at our deepest penetration of the continent we saw through the breaks in the overcast the same plateau we had been flying over all day —not a mountain or animal in sight. We then turned left and headed toward the pole via the 20th Meridian.

A crew member was preparing to drop a small orange paper chute to be used as a marker at the pole. He weighted it down with two Scotch bottles filled with water.

At 7:28 P. M. the navigator said to the pilot, pointing down and yelling over the roar of the motors: "This is it!" The Colonel shrugged and replied: "All right, we will circle the pole but it is useless to drop a marker."

A few minutes earlier I had to be awakened for the big moment. I raced for the cameras but there was nothing to shoot unless you like blank paper. But I did observe the occasion by dropping an improvised "AP" flag, red letters on a piece of canvas, along with a flag made of a bed sheet by the boys on the U.S.S. Wyandot.

At 8:20 P. M. we were out in the clear. The sun was shining, the sky was blue and there was good visibility in every direction. But it was the same old landscape.

We landed on McMurdo ice a few seconds after midnight in bright sunshine. All hands were totally exhausted. Our reception committee consisted of assorted penguins and William Hartigan of N. B. C. television, who was waiting with a case of beer. No beer ever looked so good.

Air Exploration Completed

MCMURDO SOUND BASE, Antarctica, Jan. 14 — Operation Deepfreeze concluded today an aerial program to explore the heartland of Antarctica with three long-range flights, one of which took a United States plane 550 miles beyond the South Pole.

Two other flights were made into the uncharted territory in that half of the continent on the other side of the Ninetieth Meridian from McMurdo Sound. Details on these two flights are not yet available.

The latest flight over the South Pole was made during the return leg of a 2,700-mile round-trip survey that carried the plane from the ice runway here to a position short of Queen Maud Land on the other side of the continent.

It was the third flight over the South Pole since Jan. 3, when the United States Navy launched its program to discover the topographical secrets of the vast empty spaces on the map of Antarctica. In the last twelve days the hazardous flight to Lat. 90 degrees S.—the South Pole—has become so seemingly routine that fliers here have worked out simple traffic directions to reach it.

"Just fly straight to the Beardmore Glacier and turn right," they say.

What they do not say is that Beardmore is 400 dangerous miles away and the pole another 400 dangerous miles beyond.

Altogether, fliers using four big planes have made nine far-reaching flights covering more than 20,000 miles of the world's least explored continent of 6,000,000 square miles. The bulk of that mileage gave the United States its first look at an officially estimated total of hundreds of thousands of square miles of icy territory that never before had been seen, a statistic that will considerably strengthen the position of the United States if and when it decides to make claims to slices of Antarctica.

The present position is that the United States does not rec-

ognize any claims of seven claimant nations to areas of the continent while it reserves all its rights in the Antarctic.

The priority these flights have been given might indicate that the United States may be moving toward a position of possibly making claims, but not a Navy man here will discuss the subject.

It is conceivable that these major flights were carried out one after the other with amazing rapidity and at great risk in an effort to beat the Russians to the first look. Only this week the Soviet Antarctic expedition reached the shoreline of the Antarctic in the vicinity of Long. 90 degrees E.

Moscow announced earlier that the Soviet expedition would be equipped to carry out air reconnaissances. A few years ago the Soviet Union reminded the world that it did not want to be forgotten when the icy continent might be carved up.

An indication of the priority the United States flights had received was evident at a news conference given aboard the U. S. S. Wyandot this week by Rear Admiral George J. Dufek, naval chief of Operation Deepfreeze. He said the ice, on which the planes have been operating, was breaking up and that the possibility existed that a piece of ice might break off and carry the marked-off runway and planes into the Ross Sea. He stressed that if the fliers happened to be in the planes then they could be rescued by helicopters, and thus "the safety of personnel was not involved."

Summing up, Admiral Dufek said:

"We are now in a position where we can call it a day or take a chance of making a few more flights at the risk of losing aircraft on the ice going out. We have decided to take this chance."

Planes Reach New Zealand

AUCKLAND, N. Z., Wednesday, Jan. 18—Aided by tailwinds, four United States aircraft made a fast return flight to New Zealand today from the Antarctic.

The planes—two Skymasters and two Neptunes—left McMurdo Sound at 2:25 A. M. The first Skymaster landed at Wigram Airport near Christchurch at 12:55 P. M. It carried Comdr. G. R. Olliver, who was injured in a plane crash last month in the Antarctic.

The three other aircraft all landed within twenty minutes.

Argentina Sets Polar Policy

BUENOS AIRES, April 18—Argentine bases in the Antarctic were placed under the jurisdiction of the Navy today. A decree also placed responsibility for Argentine policy on all Antarctic questions in the national defense council.

Byrd Welcomes Soviet Expedition

Message to Russians Offers to Exchange Antarctic Data

ABOARD U. S. S. WYANDOT, Off Ross Island, Antarctica, Jan. 15—Admiral Richard E. Byrd has welcomed the Soviet expedition to Wilkes Land. At the same time he noted the United States got a first look at the general area where the Russians plan to set up inland scientific stations.

The greeting was radioed from this Navy cargo ship about a week after the Russians arrived off the icy continent that eleven nations will study jointly during the International Geophysical Year, 1957-58. At last report the Russians were trying to find a site for their main scientific station in the vicinity of Knox Coast. The Russians plan three stations, the two others being in the interior.

The International Geophysical Year is a period set aside by many nations for the purpose of coordinated scientific observations of the earth and its atmosphere.

Admiral Byrd's message, which was sent after Navy fliers had completed nine long-range flights into the Antarctic heartland, was addressed to Dr. Mikhail M. Somov, head of the Soviet expedition, who is presumably aboard the main expeditionary ship Ob. The message by the officer in charge of United States Antarctic programs read:

"Welcome to Wilkes Land. Hope you are having good luck finding your I. G. Y. [International Geophysical Year] base site. We recently flew over interior in vicinity of your planned inland bases. Surface does not appear rough, but glacial plateau ranges between 11,000 to 13,000 feet elevation. We would like to exchange weather information. Siple joins me in sending our best wishes for success in our international effort in science."

Dr. Paul A. Siple of Arlington, Va., is director of scientific projects of Deepfreeze, the code name of the United States program in Antarctica. The program calls for the building of up to eight stations in scattered areas of the continent.

Admiral Byrd's message would seem to let the Russians know indirectly that exploration flights had given the United States a look at the area where they plan to establish two inland stations. First look is generally considered to be among the factors that may some day play a role in the complex problem of deciding claims to the Antarctic.

Admiral Byrd's staff said an attempt was made to radio the message directly to the Ob, but this was unsuccessful. It was impossible to make contact with the ship, possibly because the Soviet has not so far provided its radio frequencies to other nations. It was decided to send the message to the National Academy of Science in Washington for relay to Dr. Somov via the Soviet Academy of Sciences in Moscow.

It is possible that one Navy ship may meet the Russians in the Knox Coast area later this season.

Details of another United States flight, the longest exploratory one by Operation Deepfreeze this season, were given today. It was a 3,450-mile round-trip trans-continental flight to Weddell Sea.

The nonstop flight was completed yesterday with the landing on the deteriorating ice runway here of a two-engine Neptune P2V, as the Navy calls it.

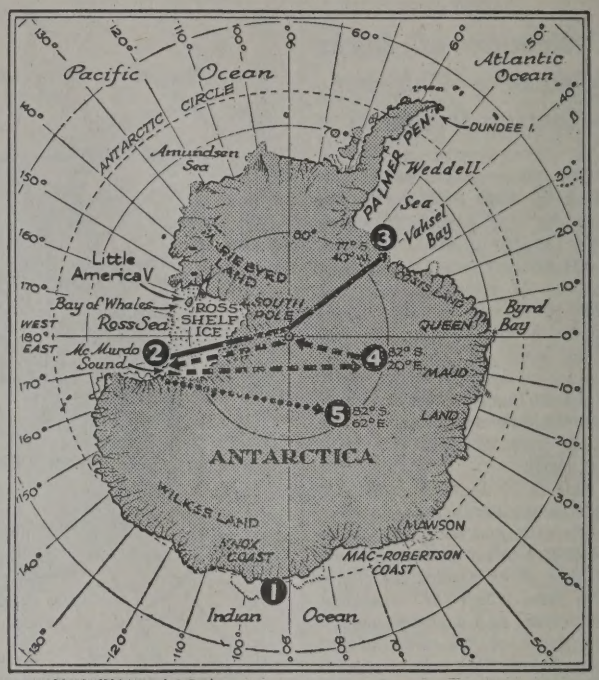
The Neptune had taken off Friday and had flown to the Weddell area via the South Pole, which has been turned into a sort of traffic circle by Navy fliers since they began air operations Jan. 3. The most distant point reached was Lat. 77 degrees S. Long 40 degrees W.

Four mountain ranges with peaks to 10,000 feet were found between Lat. 85 degrees S. and the Weddell Sea bay ice.

The Neptune flight was one of three completed yesterday by Navy airmen. The two other flights were made by four-engine Skymasters. Both reached a point about 550 miles beyond the South Pole in the quadrant south of Africa.

One plane reached Lat. 82 degrees S. Long. 62 degrees E. on a 2,500-mile round-trip flight. The other plane, which flew over the South Pole, reached Lat. 82 degrees S. Long. 20 degrees E.

The fliers in the first plane returned with the discovery that just south of their deepest penetration into the Antarctic heartland they had seen a plateau that reached 14,400 feet.



Russians searching for an Antarctic base site were welcomed to the Knox Coast area (1) by a message from the U. S. expedition. The Americans flew from McMurdo Sound (2) via the South Pole to the Weddell Sea (3) and back. Other flights were made to Lat. 82 degrees S. Long. 20 degrees E. (4), with the return via the South Pole, and to Lat. 82 degrees S. Long. 62 degrees E. (5).

Soviet Ship Begins 20,000-Mile Tour

LONDON, Feb. 29 (AP).—The Soviet Antarctic expedition's Diesel electric ship Ob left its Mirny base last night on a three-month 20,000-mile tour of oceanographic research.

The trip will take the Ob and its crew into the southern parts of the Indian Ocean along the east coast of Antarctica. Then it will head for New Zealand and the Australian coast, back to the Davis Sea, into the Western Indian Ocean and return to Leningrad via the Atlantic.

ANTARCTIC FLIERS CROSS POLE OFTEN

But No One Has Matched the Feat of Scott, Last Man to Make a Visit on Foot

ROSS ISLAND, Antarctica, Jan. 18—Forty-four years ago today Capt. Robert Falcon Scott of Britain reached the South Pole. Since then no one has even tried to duplicate his feat of getting there on the ground.

During the last couple of weeks, however, several dozen United States Navy airmen have flown over the Pole.

All told, four flights in twelve days were made over the South Pole.

Captain Scott had hoped that he would be the first man to set foot at Lat. 90 degrees S. But when he got there he found a note waiting for him.

It had been left by Capt. Roald Amundsen of Norway, who, with four companions, had outraced him to the Pole by more than thirty days, arriving on Dec. 14 1911. Capt. Amundsen was about a week away from his base at Bay of Whales on his way back when Capt. Scott, with his four companions, spotted a scrap of paper at the Pole.

Capt. Amundsen had always been a "North Pole man," and as he stood at this Pole, half a world away, he wrote about his historic achievement as follows:

"Can anything more topsy turvy be imagined?"

Capt. Scott, writing in his diary, said:

"The Pole. Yes, but under very different circumstances from those expected. * * * great God! This is an awful place and terrible enough for us to have labored to it without the reward of priority. * * * now for the run home. I wonder if we can do it. And a desperate struggle. * * * well, we have turned our back now on the goal of our ambition and must face our 800 miles of solid dragging—and good-by to most of the day dreams!"

Captain Scott and his companions perished on the way home. The last entry in his diary was dated March 29. Eight months later, at the end of the Antarctic winter, the bodies were found in a tent on the Ross Shelf Ice, about 100 or so miles from "home."

"Home" was a wooden hut that was built here at Hut Point, on Ross Island, during Captain Scott's discovery expedition of 1901-4. The hut still stands in a lava rock area.

It has been seen daily by Navy Seabees who are now setting up a United States base in the Hut Point area. It is one of several bases the United States is establishing to support its Operation Deepfreeze program in the International Geophysical Year, 1957-58.

A little of the billions of tons of snow that have fallen here over the last five decades has crept inside the hut, the result being that the interior of the little structure is almost a solid block of ice. The snow has almost succeeded in entombing the hut, and it now is possible for men to sit on the roof. Some of the Navy men have done exactly that, posing for pictures as they mix their little adventures with the triumphant ones of Capt. Scott.

Citrus Used to Curb Scurvy

Capt. James Cook, British explorer, was the first to use citrus juice to fight shipboard scurvy.

Shackleton Base Camp Still Stands

Members of United States Operation Deepfreeze found this rude wooden hut standing in the Antarctic where it was used 48 years ago by Britain's Sir Ernest Shackleton, first explorer to come close to the South Pole.

CAPE ROYDS, Antarctica, Jan. 11—Almost five decades of the world's windiest weather have failed to knock over a wooden hut built near here by Sir Ernest Shackleton.

It was from this hut, built in 1908, that the British explorer and members of his Antarctic expedition of 1908-1909, left on an attempt to score three "firsts" in South Polar endeavor. They scored two.

One group ascended a peak in the backyard, Mount Erebus, an active volcano 13,200 feet high.

A second group reached the South Magnetic Pole by an arduous 1,260-mile round-trip journey. A third group under Shackleton, himself, sledged about 800 miles south, only to fall short of the South Pole by ninety-seven geographic miles.

Shackleton in his diary said: "Our last day outward [Jan. 9, 1909]. We have shot our bolt. * * * Whatever regrets may be, we have done our best."

He might have reached the Pole but the Manchurian pony the party had been counting on for meat had fallen into a crevice. Shackleton believed he would not have enough food to reach the Pole and return to the hut, and he chose to return to the hut. Less than three years later, on Dec. 17, 1911, Capt. Roald Amundsen became the first man to reach the Pole. Capt. Robert F. Scott reached the Pole Jan. 17, 1912, and died on the return.

Men of Rear Admiral Richard E. Byrd's Antarctic command, flown here by helicopter from the Navy ship of Operation Deepfreeze now in the McMurdo Sound area, inspected the Shackleton hut.

ANTARCTIC IS SEEN AS POPULATED AREA

WASHINGTON (Science Service)—The Antarctic will never again be unpopulated, a member of the United States Army General Staff told the American Geophysical Union meeting here.

He implied that scientific parties and guardian forces would make up the Continent's permanent population. The population would be a result of the forthcoming International Geophysical Year (1957-58), he said, despite the fact that nations will fight over territorial rights "for many years to come."

At the close of the geophysical year, he predicted, most of the Antarctic's major geographic secrets would have been learned. Man also would have seen more than 2,000,000 square miles of the Antarctic "yet to be seen for the first time."

The Continent, he reported, appears to be a "Siamese-like" juncture of two great land masses. One is called East Antarctica and the other, only half as big, West Antarctica. Where these land masses come in close contact a high-faulted mountain forms a backbone to the whole continental mass.

East Antarctica was described as a massive Precamirian (more than 510,000,000 years old) shield superimposed by a great dome of snow and ice, and toward its center reaching in excess of 13,000 feet elevation.

ICE CHASM HALTS U. S. POLAR PARTY

Trail-Blazing Group Plans to Make a Detour Around 40-Mile-Long Crevasse

ABOARD U. S. S. WYANDOT, Jan. 17 (AP)—At Little America V a small tractor party led by Lieut. Comdr. Jack J. Bursey of Grand Rapids, Mich., began a 500-mile journey into Byrd Land, where a United States base will be set up next year.

Commander Bursey's party, which will mark the trail and pick the exact base site, reported all going well forty miles out.

Four of the seventeen buildings to be erected at Little America are already up and being used. Eighty per cent of the total cargo for the base now has been unloaded.

The expedition suffered one setback at McMurdo Sound. Ice floes pinched the tanker Nespelen. As a result, 107,000 gallons of aviation gasoline leaked into the sea or were contaminated by water in the hold.

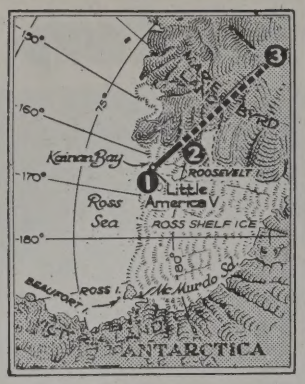
ABOARD U. S. S. WYANDOT, off Ross Island Antarctica, Jan. 19—An enormous crevasse in the Ross Shelf Ice has temporarily stopped a Navy trail party attempting to make the longest journey by mechanized surface vehicles in the history of Antarctic exploration.

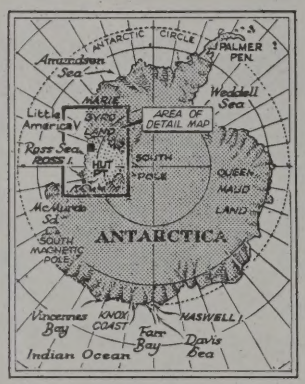
Only three days after having left Little America V on a 600-mile trail-marking trip to the projected site of a United States outpost in Marie Byrd Land, the seven-man group found the route blocked by a crevasse forty miles long and ninety-five feet deep. There was no report on the width of the crevasse, which is about seventy-five miles east of Little America V.

The group, using three tracked vehicles, sent a message that it planned to backtrack five miles, then make a northern end run around the crevasse and resume the journey.

The trail party departed on the trip over hazardous terrain on Saturday and discovered the chasm Monday. But word that progress had been stalled did not reach this Navy cargo ship until today. So far a Little America-based Otter airplane has twice flown to the trail party to lend reconnaissance support.

The group is led by Lieut. Comdr. Jack Bursey of Grand Rapids, Mich., who has been in the Antarctic twice before with Rear Admiral Richard E. Byrd's expedition of 1928-30 and with Admiral Byrd's third expedition of 1939-41. Less than a week ago he reconnoitered the proposed route from a long-range Neptune plane, which made a round-trip nonstop flight from Little America to the area of the outpost.





EXPEDITION BLOCKED: A United States trail party going from Little America (1) to a point in Marie Byrd Land (3) was stopped by a huge crevasse in the ice (2).

Meanwhile, construction was proceeding at United States wintering bases at Little America V in the Kainan Bay area and at Hut Point on Ross Island, 400 miles to the west. Prefabricated buildings were going up at a faster clip at Little America than at Hut Point, the reason being that most of the cargo destined for the Little America base has been unloaded while bad ice conditions have seriously obstructed unloading operations here.

As a result the three icebreakers of this expedition, the Glacier, Eastwind and Edisto, have been engaged in a cargo shuttle operation during last week. They have been taking cargo from this ship and proceeding to Hut Point through a thirty-mile channel cut in the thick bay ice. There the cargo has been unloaded onto vehicle-drawn sleds and transported the last six miles to the base.

Yesterday the Wyandot had to get out of the way of an iceberg, about 100 feet long and up to forty feet high, that was drifting close to the ship, a thin-skinned cargo vessel. An attempt was made by a twenty-three-ton landing craft to deflect the chaotic mass of ice, but the little vessel looked like a fly trying to fight an elephant. The ship finally backed away and the iceberg missed hitting the bow by about twenty-five feet.

Whiteout Halts U. S. Party

LITTLE AMERICA V, Antarctica, Jan. 30 (AP) — United States trail blazers have been pinned down for two days by a blinding whiteout a little more than half way on their journey deep into Marie Byrd Land.

The whiteout is an Antarctic phenomenon in which the horizon and snow terrain are lost in a white-blue light refraction.

ANTARCTIC RESCUE OF 7 IS COMPLETED

Finding of Downed Party in Mountains 125 Miles From Base Cheers Expedition

ABOARD U. S. S. EASTWIND, in McMurdo Sound, Antarctica, Feb. 9—A dispatch received here tonight said that all seven Navy men, found safe earlier in the day with their missing plane on Edward VII Peninsula, had been rescued. [In Washington, the Navy reported that the men had been returned to the expedition's base at Little America V.]

The message from Little America answered the big question of what happened to the seven. Their Otter plane had been missing since last Friday. It had been on a 350-mile flight to bring back to the base on the Ross Shelf Ice some of the men of a trail-blazing party into Marie Byrd Land to the southeast, when it vanished.

The dispatch received here at 6:20 P. M., local time [1:20 A. M., Thursday, Eastern standard time] said: "All hands safe. Walked away from plane."

The news of the rescue brought relief and jubilation to Rear Admiral George J. Dufek and the 2,000 men he commands in Task Force 43.

The dispatch was the second of the day radioed back to Admiral Dufek aboard the icebreaker Eastwind.

The first came in about 1 P. M., saying the missing plane had been found in the region of the Alexandra Mountains, about 125 miles northeast of Little America. The position was Lat. 77:32 S, Long. 154:10 W. The pilot flying the search plane, also a single-engine Otter, said he was unable to land.

But the pilot, Lieut. Don M. Sullivan of Alexandria, Va., sent back the first cheering words on the missing Otter since Operation Deepfreeze threw all available planes and ships into the effort to reclaim the seven men from the world's most hostile continent. The words were: "Personnel believed well." A rescue helicopter was flown from Little America by Lieut. Conrad Larson of Winchester, Mass.

Aboard the Eastwind, men walked around pounding each other on the back. On the cargo ship Wyandot, alongside, the 400 men aboard cheered as the announcement was made over the loud speaker. The McMurdo Sound base is 400 miles westward across the Ross Sea from Little America.

The search had began last Friday morning. The Otter had taken off at 4:08 A. M. that day to fly back from mountainous Marie Byrd Land to Little America. Aboard were seven men—three crew members and four men of the trail-blazing party.

That trail-blazing party had left Little America on Jan. 14 with three tracked vehicles to mark off a route of about 600 miles to a point where the United States plans to build a Byrd station observatory next season. But their vehicles began breaking down at the 350-mile point and the decision was made to fly the men back.

Sixty-seven minutes after the take-off the plane made its last radio contact with the base.

The Men Rescued

ABOARD U. S. S. ARNEB, at Sea, Feb. 9 (UP)—The seven men rescued today from the downed Otter in Antarctica were Lieut. Comdr. Glen H. Lathrop Jr., of Costa Mesa, Calif., pilot; Lieut. Paul A. Streich of California, Md., co-pilot; oJhn H. Floyd Jr. of Detroit; George Moss of North Providence, R. I.; Alvah G. Edwards of Lake Bay, Wash.; Chester M. Stevens Jr. of Salona, Pa., and Roland Levesque of Beverly, Mass.

Feb. 10

At Little America, newly built on the Ross Shelf Ice at Kainan Bay, the seven were examined by a physician and declared fit. They radioed word to that effect to their families in the United States, 12,000 miles away.

After the missing Otter plane had been found yesterday noon, a helicopter from Little America landed alongside it. The 'copter pilot and the physician with him reported that a survival camp had been set up but the men had left. The helicopter took off again and found the seven men walking westward toward Little America.

POLAR EXPEDITION MAKING PROGRESS

U.S. Navy Leader Says Group Is Ahead of Its Schedule—Project at Midway Point

ABOARD U. S. S. GLACIER, in McMurdo Sound, Antarctica, Jan. 21—Rear Adm. George J. Dufek reported today that Operation Deepfreeze was ahead of schedule "all the way down the line."

In an optomistic report issued at roughly the midway point of the United States' expedition to the Antarctic, the commander of Task Force 43, which is the Naval arm of the expedition, said a sort of construction boom was going on at the two bases that are being set up, one at Hut Point, on Ross Island, and the other 400 miles to the east, at Little America V in the Kainan Bay area of the desolate Ross Shelf ice.

"I think the tough part is over," the 52-year-old Admiral told a group of newsmen. "Up to now, the major effort had to go into fighting the elements, into the simple living, and not into constructive labor. Now there has been a change. Cargo is moving and the building job is getting done."

A total of 167 men will spend the winter at the two bases—ninety-one at Hut Point and seventy-six at Little America V. Eleven of the seventeen buildings being set up at Little America V have been completed. Foundations for several additional structures have been laid out on the sloping, rocky area. The building job will swing into high gear now because of a helpful assist from nature in the last forty-eight hours.

Winds of forty-five miles an hour and six-foot swells in the Ross Sea ripped out about 700 square miles of bay ice from McMurdo Sound. The ice area, twenty-eight miles long and twenty-five miles wide, had stalled the cargo ships Wyandot and Greenville Victory thirty-five miles north of Hut Point. At some spots the ice was at least seven feet thick.

Both vessels were able to proceed south today to a point only eleven miles from Hut Point. Their cargos were being transferred to two icebreakers, the Glacier and the Eastwind, and they in turn were ferrying the cargo six miles south through a channel that has been cut into the thick bay ice.

The ice floated out of McMurdo Sound in such quantities that the cargo ships hastened to move out of the path. They steamed about fifteen miles north to Beaufort Island, where theyl waited for the potentially dangerous ice to float into the Ross Sea.

A group of Emperor penguins made up a disinterested audience as the U. S. S. Glacier went about its ice-breaking task in the Antarctic.

POLAR BASE BUILT ON LAVA TERRAIN

U.S. Seabees Turning Remote Hut Point Location Into an Outpost of 34 Buildings

HUT POINT, Ross Island, Antarctica, Jan. 23—Twelve of the least hospitable acres in the world, cradled on a series of dead volcanoes, are being converted into a United States outpost in the Antarctic by 100 Navy Seabees.

Battling an enemy composed of merciless blizzards, high winds and frigid temperatures, the men are working around the clock in an exhausting but successful effort to superimpose a community of thirty-four buildings on a lava-base terrain that never was meant for living. It is an all-out war of construction the men are fighting, and nothing less.

On paper their task has almost a routine ring: to set up a year-round station that will at once serve as an air operating facility and support a projected scientific observatory at the South Pole, 800 miles away. It is one of two stations—the other is at Little America, 400 miles to the east—that the United States is establishing to support its role in the International Geophysical Year, 1957-58.

The temperature here occasionally has dropped to 14 degrees and winds have worked up to sixty-mile an hour savagery. Even the frozen earth has refused to surrender more than a few pounds of rocks when the men attacked it with dynamite. Since their arrival here a month or so ago, the men, using bulldozers, have been able to level a piece of sloping fill for their up-and-coming village.

In short, Hut Point may be almost 10,000 geographic miles from New York, but the distance from the world the men left behind cannot be calculated.

The story of the Seabees' triumph over this bleak corner of the Antarctic began on Dec. 20. A group of men from the ice-breakers Edisto and Glacier made the thirty-five-mile journey over the frozen waters of McMurdo Sound to the base site that had been chosen here at Hut Point.

The thick ice kept the ships from getting any closer to Hut Point, which is one of the most famous pieces of terrain in the huge Antarctic continent. It was from this hut, which still stands here, half obliterated by snow, that Capt. Robert F. Scott left on his trek to the South Pole, reaching it Jan. 17, 1912, only to perish on the way back.

When the men arrived here they pitched their tents on the rocky soil and waited for almost 2,500 tons of equipment to begin arriving so they could get started with the construction project. But the equipment came in dribbles, both because of the distance between the base and the ships, and because of the menacing cracks in the ice route. The U. S. S. Glacier then cut a twenty-five-mile channel through the bay ice to a point less than ten miles from Hut Point.

After a watery highway had been cut into the frozen McMurdo Sound, cargo began piling up here. However, the time spent waiting for the supplies to arrive had been an uncomfortable one, with the men going without baths, with cold C rations turning up on the menu, with the men sleeping in sleeping bags that had been tossed on the ice. Often their body heat melted the ice, and the men woke up in pools of water.

The men have begun moving out of the tents. But the barracks are not all up yet, so some of the men are sleeping in the building that some day will be the library. They still are washing out of basins, however. As for the food, however, in the opinion of the Seabees who have tasted it, it has gone from "cold and lousy" to hot and good.

Altogether, the morale at this hard-working base is high. The men are aware that they are creating something, for they see new results daily. Unlike the so-called "wardroom explorers" back on the ships, they feel as if they are direct participants in the polar project.

Lieut. Cmdr. David W. Canham, 35, of Detroit, is the officer in charge of the base.

Once the ships leave the Antarctic early in March, the ninety-one men left at Hut Point will be on their own until October, when the arrival of United States planes from New Zealand is scheduled. To while away their leisure hours, the men will have a variety of recreations—movies, hobby crafts, reading and radio contact with their families back home.

AIRSTRIP ON LAND IS ANTARCTIC AIM

U. S. Party Tests Feasibility of Building First Such Base on Icebound Continent

ABOARD U.S.S. WYANDOT, in McMurdo Sound, Antarctica, Jan. 28—The United States is reconnoitering the terrain in this mountainous corner of Antarctica to determine the feasibility of constructing an airstrip on land.

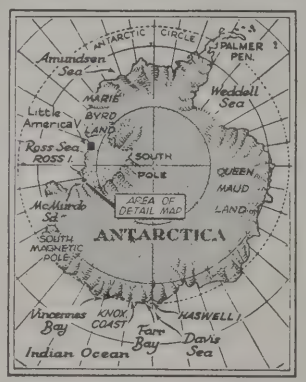
So far as is known no country ever has built a land runway on the 6,000,000-square-mile continent that now is host to several nations including the Soviet Union, that are participating in the Antarctic phase of the International Geophysical Year, 1957-58. All the flying that has been done in the Antarctic since Wilkins and Byrd introduced aviation to exploration there in 1928-29 has been carried out by aircraft operating directly from ice, snow or sea.

The search for a piece of land suitable for a runway was begun several weeks ago by Navy Seabee engineers attached to Operation Deepfreeze, which is the United States' program in the geophysical year. They have been conducting aerial and ground operations covering scattered areas in the McMurdo Sound region but so far they have not found a tract that meets the specifications for handling long-range wheeled aircraft.

According to an official source here, such an airstrip would have to be a reasonably level piece of terrain approximately 7,500 feet long and 200 feet wide. Adjacent areas would have to be suitable for taxiways, base buildings and roadway approaches. It might take an estimated total of 1,000 men equipped with about 5,000 tons of construction equipment at least two, and possibly four, of the Antarctic's brief working summer seasons to convert even an ideal site into an air station, the source added.

In the opinion of Antarctic experts, a land runway would have a variety of impacts on the Antarctic continent. It would allow planes to fly in as early as October, which is about three months earlier than ships can now reach the continent because of the thick belt of ice that surrounds the shoreline. It also would allow planes to operate until late April, which is two months after the ships now must get out of Antiarctica to avoid being frozen in.

Dr. Paul A. Siple of Arlington, Va., director of scientific projects for Operation Deepfreeze, has expressed the opinion that a land strip might even put the Antarctic into year-round aerial touch with the civilized world.



AIRSTRIP SITE SOUGHT: After finding one area (1) in Antarctica unsuitable, Seabees are considering a place in Dry Valley (2).

According to Comdr. Arthur F. Mec'rs, a Seabee engineer from Port Hueneme, Calif., the current reconnaissance program has resulted in an examination of Black Island, White Island, Cape Armitage on Ross Island, and the Cape Royds and Cape Barne regions, also on Ross Island. Of these, he reported, only a section of the Royds-Barne area initially seemed to have any possibilities. However, after a group of sixteen Seabees studied the sector for more than three weeks, it was discovered that it was unsuitable because the terrain there was more than 100 feet of ice under about one foot of top soil.

Meanwhile, the group of Seabees is now investigating land conditions at Dry Valley, about forty miles west of Cape Royds, on the other side of McMurdo Sound. About two miles wide and seventeen miles long, Dry Valley is composed of glacial deposits that rise about sixty feet above sea level. So far there has been no report from this group.

It is here in McMurdo Sound that the United States is constructing an air operating facility to support its role in the geophysical year. The base at which ninety-one men are expected to winter over this year, will have two jobs: besides supporting planes it will serve as a staging area for the observatory that is scheduled to be built next season at the South Pole, 800 miles away.

Antarctic Main Base Well Dug In

By SAUL PETT

LITTLE AMERICA V, ANTARCTICA, Jan. 29 (AP.)—Three weeks ago, this main base of the American expedition to Antarctica consisted of two olive drab tents lost in a gently undulating sea of snow.

Today, it is a bustling community of twelve buildings with a working population of 140, lost in the same sea of snow. With its uniformly low, flat, orange buildings, the base looks like a low-cost housing development.

But what the camp lacks in chic it makes up in durability. It is well heated and lighted, and there are acres of food and equipment surrounding the buildings. All in all, the base looks well dug in for the worst the antarctic winter night can offer

With seven more buildings scheduled to go up soon, Little America V. is expected to be self-sustaining within a week. Thus it is much further along than the expedition's second base, 400 miles to the west, at McMurdo Sound, where changing ice conditions have delayed unloading of cargo.

At Little America V, the main and only street is a snow pavement about thirty feet wide. A tunnel of chicken wire and burlap is being built down the middle. Feeder tunnels will connect to all buildings on both sides of the street. The tunnels will be tall, to permit a man to walk upright, and the seventy-six Seabees who will pass the winter here will need them when heavy snows arrive.

The buildings already up include two communal bathrooms, a communications center, disbursing and aerological office, four barracks, storeroom, sick bay and a powerhouse.

Still to be constructed are two aircraft maintenance shops near the air strip and three buildings for International Geophysical Year (I. G. Y.) scientists working on weather study and geomagnetic and magnetic observations.

Surrounding the buildings are several hundred acres of food cases, fuel drums, housing panels, mechanics' spare parts and radio and weather equipment.

ANTARCTIC DINER IS SEABEES' PRIDE

Establishment on Ross Isle Hopes to Do Even Better in Its New Building

HUT POINT, Ross Island, Antarctica, Jan 27—Without doubt the best restaurant in these desolate parts is Losers' Diner, a candle-lit out-of-the-way place with enchanting C-ration atmosphere.

Losers' Diner is the only place in the bleak neighborhood specializing in American food à la Navy.

The story of this No. 1 eating place on Ross Island is a sort of gastronomical adventure tale in Operation Deepfreeze, the United States Navy's current role in the International Geophysical Year 1957-58. The place opened Dec. 20 in a small way, with two Primus stoves and lots of canned food.

Its first patrons were thirty-five Seabees who had the job of converting a piece of lava terrain here into a United States outpost.

Since then equipment from the cargo ships of Task Force 43 has been moving into Hut Point and Losers' Diner has added kitchen equipment and expanded its menu.

"The food used to be cold and lousy, now it's hot and good, and it will even get better," said Seabees waiting in the chow line today.

An olive drab tent and an orange prefabricated building provide the set-up. Food is prepared in the tent, which holds with four cooks and as many field ranges. The prefabricated building has picnic-type wooden tables and benches. It will become a barracks when the Hut Point settlement is completed in two weeks' time, and the diner will have its own building.

Because the Hut Point construction goes on around the clock, Losers' Diner serves, besides the regular three meals a day, a fourth ample meal at midnight.

The head cook is Harold Upton CS/1, of Colorado Springs, Colo., a Seabee of 29 who has been taking care of Navy appetites for eleven years.

"We won't be stirring up a little cloud of dust every time we move around. The ninety-one men who will be wintering here won't have to stand out in line in cold weather.

"It's going to be fine. Cakes, gravies, ice cream. Man, when you come down here next year, you won't be able to recognize Losers Diner!"

BYRD HEADS HOME FROM ANTARCTICA

Hailing 2 U. S. Outposts, He Calls Again for Permanent Bases on the Continent

IN McMURDO SOUND, Antarctica, Feb. 3—Rear Admiral Richard E. Byrd departed today from Antartica and reiterated his desire to see the United States establish permanent stations in this most remote continent.

The officer in charge of United States Antarctic programs had arrived Dec. 17 aboard the Navy icebreaker Glacier. He began the 12,000-mile journey back to civilization aboard the cargo ship Arneb, one of seven vessels supporting Operation Deepfreeze.

The Arneb, with holds emptied of 2,500 tons of cargo, is due in about a week in the New Zealand port Lyttleton.

Admiral Byrd's departure brought to a close his fifth visit since 1928. In his seven weeks in the Antarctic, his activities included another visit to the almost snow-entombed Little America I, dedication of Little America V, and his third flight over the South Pole.

"I plan to come back again," the 67-year-old admiral said as he was preparing to sail north today.

Reviewing the United States' ambitious Antarctic projects, the admiral expressed pleasure over the construction this season of two stations, one at Little America V on the Ross Shelf Ice and the other at Hut Point on Ross Island, 400 miles to the West.

"They both were set up despite weather obstacles over which men had no control," he said. "I would like to see the United States set up permanent settlements on this continent."

The present United States position is that it does not recognize claims to the Antarctic advanced by seven nations, while reserving all rights in the area.

Admiral Byrd's departure came less than twenty-four hours after he had visited the Seabees hard at work at the Hut Point station. He flew to the base by helicopter from the Wyandot, moored to bay ice in McMurdo Sound, about ten miles away.

He found ten finished pre abricated buildings on a site that only six weeks ago was a barren plot of volcanic rocks. The temperature was 13 degrees as he inspected the base that will serve both as an air operating facility and a staging area for the International Geophysical Year observatory the United States plans to build next season at the South Pole, 800 miles away.

After picking his way among hundreds of crates that are being converted into a community of thirty-four buildings, the admiral paid his respects to the memory of his "boyhood hero," Capt. Robert F. Scott. He visited the historic landmark at Hut Point, the half snow-covered wooden hut from which the British explorer started for the pole in late 1911.

Captain Scott reached it in January, 1912, only to perish with four companions on the return journey.

Accompanying the admiral on the afternoon tour were Dr. Paul A. Siple, director of scientific projects of Operation Deepfreeze, and Maj. Murray A. Wiener of the Air Force, a member of the admiral's staff. Both Dr. Siple and Major Wiener sailed with the admiral aboard the Arneb.

They were joined by Capt. Stevan Mandarich, the admiral's chief of staff.

The icebreaker Edisto sailed today to escort the Arneb through the pack ice and then to survey Cape Adare, the site of a possible joint weather station with New Zealand.

The New York Times (by Bernard Kalb)

ADMIRAL BYRD AT SCOTT'S HUT: On Feb. 2, just before he left the Antarctic, Rear Admiral Richard E. Byrd, commander of U. S. expedition, visited this house at Hut Point, Ross Island. It was used half a century ago by Capt. Robert F. Scott, British explorer. This photo was taken to New Zealand aboard the Admiral's ship, and flown here.

Antarctic Flyers Return Home

The crew of the first plane to reach the Antarctic continent on the "Operation Deepfreeze" expedition, the first ever to bisect the Antarctic continent and the first to see at least two new mountain ranges in Antarctica was the first crew home

Their plane, a big P2V Neptune, landed at Patuxent Naval Air Base at 3:45 p.m., Jan. 28

The big ship with its bright orange tail and wing-tips was met by the families of the crew and a recorded brass band. The crew members said they were glad they made the trip, were glad to be back and would not care to do it again. Comdr. Torbert summed up the reaction of the crew, saying, "It was different."

The weather they left behind in Antarctica was about the same as they foun dat Patuxent. Comdr. Torbert said it was a "warm summer" in Antarctica. "The temperature got up into the 30s," he said, "and sometimes we were uncomfortably warm in our winter gear."

In making their surveys, the crew made the first flight from one edge of the continent across the pole to the opposite edge and back. On the way, they crossed territory never before seen and located at least two hitherto unknown mountain ranges.

They found several possible landing places at the pole at an altitude of 9,000 feet. Comdr. William M. Hawkes, co-pilot on the flight, said the polar area was "perfectly flat in every direction you could see." The plane did not land at the pole because, Comdr. Hawkes said, "it was late in the operation and we did not want to take a chance."

Haven for Penguins

Ten thousand penguins inhabit South Georgia Island, 1,200 miles east of Cape Horn.

POLAR EXPEDITION HAS OWN DENTIST

Toothaches Induced by Cold Have Plagued Other U. S. Groups in Antarctic

ABOARD U. S. S. WYANDOT, in McMurdo Sound, Antarctica, Jan. 20—Antarctica is to have a full-fledged dentist. Lieut. David Knoedler, D. D. S., of Mosinee, Wis., is one of eighty-nine Navy volunteers who will spend the winter at the United States outpost now being constructed a few miles from here at Hut Point Ross Island.

The base is one of two—the other is at Little America V. 400 miles to the east—being set up to support the United tSates Antarctic program. Each station will have a physician, but only Hut Point will have a dentist as well.

The United States Antarctic service expedition of 1939-41 reported when its assignment was completed, "the most usual and most painful malady encountered was toothache."

This report noted that as soon as cold air came in contact with infected teeth the pain became unbearable. Temperatures of 50 and 60 degrees below zero Farenheit contracted fillings and they dropped out of cavities. Fresh decay developed and many otherwise sound teeth were lost. The expedition's physician did the best he could with improvised fillings and limited dental facilities.

This footnote in the exploration of Antarctica accents Amundsen's foresight on his South Pole expedition in 1911. Writing about what he transported to the continent he said:

"Another article taken was a tooth extractor, and this also proved valuable, for one man had a tooth which became so bad that it was absolutely essential that it should be pulled out, and this could hardly have been done without a proper instrument."

In contrast with Amundsen's experience, the teeth of those spending the winter at Hut Point will get professional care.

"My equipment consists of a dental field unit containing all the necessary instruments," says Dr. Knoedler, "I've got a drill, a folding chair, a good overhead light and so forth not to mention six pounds of silver alloy and ten pounds of mercury for fillings. That should be enough to take care of everyone's cavities, including the penguins'."

To prepare for the assignment Dr. Knoedler, who was graduated from Loyola University in 1950, spent a short time at the Naval Medical Research Laboratory at New London, Conn., and at the Naval Gun Factory Dental Clinic in Washington. He learned how to conduct research experiments at the first school and how to take all types of dental pictures at the seocnd.

His stay here will not be confined to keeping teeth healthy. "All men had their teeth checked before they came down," he says. "Now we want to find out more about the impact of cold weather on teeth. Further, we want to find out the effect of boredom on teeth, boredom being something these men will face. Some studies have shown 'trench mouth, for example, may be due to conditions that involve tension, fatigue and strain, and we would like to know more about that."

OPTIMUM OGLING: An antarctic native takes a considered look at a newsreel cameraman at McMurdo Sound, near Little America. Behind the curious penguin is a crewman from the United States Navy icebreaker USS Edisto.

PENGUIN COLONY ABOARD U. S. SHIP

16 Emperors Head Collection Gathered by Zoologist at Antarctic Base

ABOARD U. S. S. EDISTO, off Ross Island, Jan. 15—Sixteen Emperor penguins, Antartica's famous aborigines, have been captured on the ice of McMurdo Sound here in the name of science.

The birds, about three feet high and weighing fifty pounds or so apiece, are only a few that have been taken into custody during the last few days under supervision of Dr. Malcoln Davis of Herndon, Va., curator of birds at the National Zoological Park, Washington, D. C.

Dr. Davis has also collected five live skua gulls, of which there is none alive in the United States, a pair of Weddell seals, which are plentiful in these parts, and four baby Adelie penquins, taken from nearby Cape Bird rookery.

The creatures that survive the 12,000-mile journey from McMurdo Sound to Washington will be turned over to the National Zoo when this Navy icebreaker returns to the States in the early spring.

All these inhabitants of the world's most silent continent have been given temporary accommodations on the Edisto's noisy fantail—the Emperors in a large wooden pen, the skuas in stall boxes, the 250-pound seals in a canvas tank and the Adelie chicks in emptied radio transmitter box still marked, "Fragile—Handle With Care."

The fantail is directly under the helicopter flight deck, and Dr. Davis, now on his third trip to Antarctica, is worried as to the effects of the noise on his fauna.

Also, Dr. Davis is having his hands full trying to feed his captives. The Emperors have to be forced-fed—"You hold the bird and stuff a piece of red cod down his throat; but he may eventually learn to eat the food on his own," said the zoologist.

The seals haven't eaten since he took them a few days ago. "They simply haven't learned yet," Dr. Davis remarked.

The skuas will and do eat anything.

From his first Antarctic trip in 1939 Dr. Davis took back about a dozen Emperor penguins, one of which established a record for longevity in the United States, six years and three months. The others survived only six to eight months. From his second trip aboard this icebreaker in 1948 Dr. Davis returned with a dozen more Emperors and none lived longer than eight months.

U. S. ARTIST DRAWS ICY POLAR SCENES

Naval Officer Cuts Frigid Wasteland Down to Sketch-Pad Size

IN McMURDO SOUND, Antartica, Feb. 13—For the past six weeks or so Commander Standish Backus Jr., of Santa Barbara, Calif., has been cutting the Antarctic down to the size of his 6-by-6-inch sketch pad.

Altogether, Commander Backus has drawn several hundred rough sketches, but he has not held any one-man showings on the bulkheads of the United States Coast Guard icebreaker Eastwind, on which he now is living. However, a few impatient connoisseurs have thumbed through his pads and they believe his sketches do justice to the Antarctic.

Commander Backus is 45 years old. He wears his hair crew cut, prefers earmuffs to a beret and is the only expeditionary artist in uniform with Operation Deepfreeze, the United States' role in the Antarctic phase of the International Geophysical Year, 1957-58. He is a veteran of World War II's naval combat art section.

The assignment he was given when he joined Operation Deepfreeze was to prepare a variety of illustrative material showing the expedition conquering the Antarctic, and not vice versa, to aid the Navy's public relations program.

"I've tried to get around as much as I could to see the different phases of the operation—the ships unloading and the base-building at Hut Point," he said the other day. "I've also had a chance to visit Scott's old hut at Hut Point and Shackleton's old hut at Cape Boyds. It has given me an opportunity to compare the old and the new. Also, there is plenty of wildlife here—penguins, seals, whales, gulls. There is no limit to the impact of the Antarctic on an artist. It is enormous and vast and magnificent, and it makes a man feel very very humble. But it is not a great place to work."

U.S. Party Finishes Unloading of Cargo For Antarctic Base

LITTLE AMERICA V, Antarctica, Feb. 16 — Operation Deepfreeze unloaded the last of its cargo in Antarctica tonight for a grand total of 9,235 tons.

The final load, including a three-ton generator, was dropped off by the U. S. S. Edisto at Little America's harbor, Kainan Bay, which is an indentation in the Ross Shelf Ice. The outpost itself, now being rushed to completion before the long winter night begins in April, is about three miles south of the bay.

The final Antarctic unloading job was a ticklish proposition. It involved the double transfer at sea of the whole load—from the cargo ship Wyandot, to the landing craft to the Edisto. The rough Ross Sea made it impossible to pass the cargo directly from the Wyandot to the Edisto.

The Edisto slipped into the bay and inched up to the towering shelf ice at a point where it descended to about fifty feet. The cargo was unloaded by crane along the edge of the shelf.

The unloading of the last nine tons of cargo ended perhaps the least glamorous but most important job of Operation Deepfreeze.

Seven United States ships with about 2,000 men began arriving in Kainan Bay and McMurdo Sound, 400 miles to the west, almost nine weeks ago. Since then the ships have been triumphing over obstacles created by the constantly changing bay ice conditions.

They have been able to unload every pound of their 9,325 tons of cargo. The total cargo is estimated at 840,000 cubic feet, or enough to fill more than 500 rooms eleven feet wide, fifteen feet long and ten feet high. The cost of the cargo is estimated at $10,000,000 by Lieut. Commander Joseph Fernald of Belmont, Mass. He is the supply officer for Task Force 43, the naval arm of Operation Deepfreeze.

The United States plans to construct four year-round stations in the Antarctic. Two of these now are in the final stages of completion. They are the seventy-six-man outpost here and the ninety-one-man air operating facility at Hut Point, in the McMurdo Sound area.

The other two stations are scheduled to be built next season. They will be a twenty-five-man scientific observatory in Marie Byrd Land, and a fifteen-man observatory at the South Pole. Equipment for the Byrd Land station has been stockpiled at Little America, and for the Pole station at Hut Point. All told, 5,043 tons of cargo has been unloaded here and 4,192 tons at Hut Point.

Operation Deepfreeze began purchasing the cargo in December, 1954.

"The stuff was sent to Davisville, R. I., where all the ships were loaded except the Eastwind, which was loaded at Boston," Commander Fernald said. "We bought our Otter planes from Canada, our primus stoves from Scandinavia, our bamboo for trail poles in Panama on the way down, and a number of last-minute items like ski boots and nylon rope in New Zealand before we shoved off for good. But the great bulk of the stuff came from the United States."

The New York Times (by Bernard Kalb)

Members of U. S. Antarctic expedition who are returning home wait on the Ross Shelf Ice at Kainan Bay as their gear is taken aboard the icebreaker Edisto. Tracked sled in background holds their duffel bags. Picture was sent by ship to New Zealand and flown to U. S.

U. S. ANTARCTIC SHIP BEGINS TRIP HOME

IN McMURDO SOUND, Antarctica, Feb. 12—The U. S. S. Wyandot sailed from Antarctica today on the 12,000-mile voyage back to the United States. She was 2,740 tons lighter than when she arrived here forty-seven days ago.

The journey will take the 9,000-ton Navy cargo vessel and 300 men to Norfolk, Va., with stopovers at Little America V, Auckland, N. Z., and South America. She is scheduled to reach Norfolk in mid-April.

One of seven ships supporting the United States Operation Deepfreeze, the Wyandot played an important part in providing cargo for the United States role in the Antarctic phase of the International Geophysical Year, 1957-58. Because of bay ice conditions, the ship remained almost in the same spot for about seven weeks as three icebreakers unloaded her cargo and ferried it down a narrow channel cut through the ice to the outpost being built at Hut Point, Ross Island.

The Wyandot moved only to escape icebergs, then returned to her position and resumed unloading.

TANKER ON WAY HOME

Damaged Nespelen Reaches New Zealand From Antarctic

WELLINGTON, N. Z., Feb. 23 (Reuters)—Gashed by ice floes, the United States Antarctic tanker Nespelen entered Dunedin harbor today. The tanker had been two months in the Antarctic, one of the seven United States Navy ships of Operation Deepfreeze.

A floe bore down on the Nespelen last month as she was moored against the shore ice in McMurdo Sound in the Ross Sea. Near the waterline on the tanker's starboard side is a ten-foot gash where the ice punched into the half-inch steel plates.

The Nespelen left the Ross Sea ten days ago. She met heavy weather almost all the way to New Zealand; with one propeller out of action he made only 10 knots as against her normal speed of 14. Repair work will keep the tanker in dock at least a week before she can sail for home.

U. S. ANTARCTIC SHIP ON HAZARDOUS TRIP

AUCKLAND, New Zealand, Feb. 20—The icebreaker Glacier of the United States Antarctic expedition left Lyttelton, New Zealand, today on a hazardous mission, knowing in advance it might fail.

The Glacier is towing an oil barge loaded with 250,000 gallons of aviation fuel. Its objective is to freeze the barge in the Antarctic ice for the winter so the fuel will be ready for use by aircraft of the expedition at the end of the year.

The captain of the Glacier, Comdr. E. H. Maher, thinks the barge will be fortunate to reach its destination. The barge already is very low in the water, and with seas crashing over it in Antarctic storms it may sink on the way owing to the weight of the ice that will form on its superstructure.

IN McMURDO SOUND, Antarctica, Feb. 20—A United States icebreaker scooped up 1,000 pounds of the Antarctic today to aid New Zealand's expedition to the south polar continent that is scheduled for next season.

The U. S. S. Edisto interrupted her homeward voyage to stop at Cape Royds, Ross Island, and pick up about a half ton of assorted rocks. The rocks will be taken to Wellington where they will be used by the Ross Sea Committee to raise money to finance New Zealand's 22-man expedition.

It will be led by Sir Edmund Hillary who in 1953 climbed the tallest rock in the world—Mount Everest.

ICE REPELS EXPLOSIVES

Antarctic Party Fails to Cut Path Through Bay

ABOARD U. S. S. EASTWIND, in McMurdo Sound, Antarctica, Feb. 21—This Coast Guard icebreaker attacked the thick bay ice of McMurdo Sound today with 500 pounds of high explosives and the result was a smudgy spray of ice cubes. But the ice, fifteen feet thick in spots, did not crack.

The Eastwind is making an all-out effort to cut a channel through the last three miles of bay ice leading to the new year-round outpost of the United States at Hut Point, Ross Island. It is there that the United States Antarctic expedition plans to freeze in two small tankers to serve as a fuel farm for next season's operations.

The tankers will hold 500,000 gallons of fuel, mostly aviation gas. Freezing them in safely is the last chore this season for the ships of Operation Deepfreeze.

Trouble in McMurdo Sound

ABOARD THE EASTWIND, in McMurdo Sound, Antarctica, Feb. 22—This United States Coast Guard icebreaker of 6,500 tons damaged one of her two propeller shafts last night while trying to cut a channel through fifteen-foot-thick bay ice in McMurdo Sound.

The port shaft—it is almost forty feet long and eighteen inches in diameter—was either broken or bent, but in any case it was out of commission. The exact nature of the damage will e known only when the Eastwind goes into drydock on her return to the United States. With one screw the ship is capable of doing 10 knots. Under full power she can make 15 knots.

The job of completing the channel will now have to wait for the Glacier, newest and most powerful icebreaker in the United States fleet. The Glacier, a 8,600-ton ship, is due here in early March on a return run from New Zealand.

U. S. Ross Island Base Named for Lost Seabee

WILLIAMS AIR OPERATING FACILITY, Ross Island, Antarctica, Feb. 19—This new United States outpost was formally named this week-end in memory of Operation Deepfreeze's only fatality, Richard T. Williams, a 23-year-old Seabee from Ilion, N. Y.

Ninety-one men will spend the winter at this "airopfac"—the Navy contraction for "air operating facility." Driver 3/c Williams who was working on its construction, was trapped Jan. 6 in a heavy tractor that plunged through a crack in the ice on McMurdo Sound here.

Seventy men were here today as visitors. Their icebreaker, the Edisto, with a company of 200, is sailing for home and they decided to see the base on the way.

ANTARCTICA NO HAVEN

Income-Tax Forms Turn Up There for U. S. Navy Men

ABOARD U. S. S. EASTWIND, in McMurdo Sound, Feb. 23—For the last few days a chief warrant officer, Alvin R. Rutz of Stoneham, Mass., has been patriotically handing out a free pamphlet to 196 men aboard this Coast Guard icebreaker.

Mr. Rutz, the finance officer aboard this ship, now in the Antarctic, is popular among the crew, but his free reading matter is not. It is entitled, "Your 1955 Federal Income Tax Forms."

The men, who have received forms showing how much they earned as sailors last year, have been writing in the dollars and cents on the dotted lines. Twenty-four thousand dollars is paid out monthly to the ship's company.

Navy Seeks Antarctic Volunteers; Veterans There Cool in Response

ABOARD U. S. S. WYANDOT, off Little America V, Antarctica, Feb. 15—The United States Navy issued a call today for volunteers to winter over for next season's Antarctic expedition, Operation Deepfreeze II. The call fell on cold ears.

No lines formed when the message, sent by Secretary of the Navy Charles S. Thomas to all ships and shore stations was received by this Navy cargo ship with about 300 veterans of Operation Deepfreeze 1.

The zero response probably had nothing to do with the fact the call set high standards for applicants, stipulating that requirements were comparable to those for submarine duty, among the toughest in the Navy. But it may have had something to do with the near-zero weather.

The Antarctic has enveloped the Wyandot in a heavy ice-fog. The temperature was 9 degrees Fahrenheit and the winds worked up to 58 miles an hour.

The ice-fog has stalled the ship on her homeward voyage. She sailed Sunday from McMurdo Sound on the 12,000-mile trip back to Norfolk, Va., with a final brief stopover here at Little America V, 400 miles east of McMurdo Sound.

The Wyandot arrived yesterday off the base's harbor, Kainan Bay, an indention in the Ross Shelf Ice. But the weather has made it too hazardous for her to carry out her last remaining Antarctic task, the unloading of nine tons of cargo and the embarking of about forty homeward-bound passengers. She was still waiting tonight for the weather to improve.

In short, the message from Washington did not arrive at a good volunteering time.

Despite the initial lack of response there was optimism in officer circles that many men would volunteer before the Wyandot reached Norfolk in April. Last year's call for Antarctic service swamped the Navy with volunteers.

A relatively small number of men will be selected for the new assignment. They will receive indoctrination and training with the Seabee mobile construction battalion (special) at Davisville, R. I. The tour of duty will be two years.

Operation Deepfreeze II is scheduled to construct several stations, including one directly at the South Pole, to support the United States role in the forty-nation scientific research of the International Geophysical Year 1957-58. About 2,000 men are in the current expedition. Two stations have been set up, one here at Little America V and the other at Hut Point, Ross Island, at McMurdo Sound.

COASTAL SURVEY IS OFF

ABOARD U. S. S. EASTWIND, in McMurdo Sound, Antarctica, Feb. 29—

Admiral Dufek canceled plans today to carry out a reconnaissance survey of the Antarctic coast during the remaining few weeks of the current work season here.

The task force commander said concern over the condition of this partly crippled icebreaker Eastwind and the ticklish job of freezing-in two small tankers in bay ice here had forced him to put off surveying the Knox Coast and Weddell Sea areas. In these two regions, about 2,500 miles apart, the United States plans to establish scientific stations next season.

Emphasizing that the decision to put off the coastal survey had been taken reluctantly, Admiral Dufek said that the icebreaker Glacier, which was to have done the job, would devote herself to helping freeze-in the two tankers and to towing to New Zealand the Eastwind, which broke her port shaft last week.

The Glacier is due here from New Zealand shortly with one of the tankers in tow. The other was towed here weeks ago.

According to the admiral, the Glacier will cut into the fifteen-foot-thick bay ice two "slots" into which the tankers will be frozen about three miles from the new United States air station at Hut Point, Ross Island. Containing more than half a million gallons of fuel, these tankers will serve as sort of gasoline depots for United States operations in the Antarctic next season.

Polar Radio Silence Ends

ABOARD U. S. S. EASTWIND, in McMurdo Sound, Feb. 27—A radio blackout that prevented the United States expedition in Antarctica from communicating with the outside world for almost four days came to an end this moring. "Ionospheric disturbances," not uncommon in the south polar continent, were blamed.

LAST SHIPS LEAVE BASE IN ANTARCTIC

Wintering-Over Party of 93 Begins 7-Month Isolation in Bleak Polar Region

WILLIAMS AIR OPERATING FACILITY, Ross Island, Antartica, March 9—Ninety-three Americans began a seven-month period of bleak isolation today when their last callers, the icebreakers Glacier and Eastwind sailed from this new United States year-round outpost. It is the largest base ever built in the Antarctic.

With the mercury down to 5 degrees below zero and winds of up to 40 miles an hour, only a few of the wintering-over party emerged from their warm barracks to wave good-by to the finals visitors of the 1955-56 season. The 91 Navy men and two civilians will not see another American until next November, when Navy and Air Force planes will begin flying in from New Zealand to open Operation Deepfreeze II.

The Navy's most powerful icebreaker, the Glacier, left the McMurdo Sound area for Little America V as Rear Admiral George J. Dufek revived plans, canceled by him only ten days ago, to conduct a base reconnaissance survey during the last few weeks of the current work season.

The Glacier has been relieved of the job of escorting or towing the partly crippled icebreaker Eastwind to Wellington, N. Z. The Coast Guard vessel broke a port shaft in tussles with the thick McMurdo Sound ice. However, after a test run today, Admiral Dufek said the ship could safely make the 2,200-mile voyage to New Zealand.

Today's farewell was not without a touch of ceremony. Addressing a messhall gathering, Admiral Dufek expressed praise for Lieut. Commander David W. Canham of Detroit, the officer in charge at the base, and his men.

"You have just completed the first stage of one of the toughest operations I've seen anywhere—in war or in peace," the 52-year-old veteran of two previous Antarctic expeditions, said.

After taking a last look at the base, the admiral, accompanied by his staff, returned to the Glacier. The icebreaker then began the 400-mile journey to Little America V, the other wintering-over base that was built this season during Operation Deepfreeze I. After the vessel drops off mail at that outpost, she will begin the coastal survey.

The ship's final job here was the mooring of two small tankers that contain more than 500,000 gallons of fuel for next season's operations.

The subzero weather at Ross Island today was virtually a warm preview of what nature has in store for the base during the winter night. The mercury was expected to drop to 60 degrees below zero at the height of the winter and winds were expected to work up to a fierce velocity of more than 100 miles an hour.

GLACIER BACK SOUTH

Icebreaker Tows Tanker to U.S. Outpost on McMurdo Sound

IN McMURDO SOUND, Antarctica, March 2 — The U. S. S. Glacier returned to the Antarctic from New Zealand tonight.

For the Navy's most powerful icebrakear, it was her second journey to the South Polar continent in less than three months. It took the Glacier, towing a small tanker, eleven days to cover the 2,200 miles of rough seas between Lyttelton, N. Z., and the United States year-round outpost now being rushed to completion at Hut Point, Ross Island.

The icebreaker first arrived in McMurdo Sound Dec. 17, the lead ship of the current United States expedition to the Antarctic, and left for New Zealand Feb. 10 to get the tanker.

Another tanker was towed to the Antarctic earlier in the season by the Coast Guard icebreaker Eastwind.

In the next week or so, the Glacier will help freeze in the two tankers, which will serve as fuel depots for next season's operations.

2 POLAR BASES ISOLATED

U. S. Stations Will Be Staffed by 166 Men Until November

LITTLE AMERICA V, Antarctica, March 10—A total of 166 Americans will spend the next seven months isolated at two bleak outposts in Antarctica.

A party of seventy-three men at this base waved good-by to their last visitors today when the Navy icebreaker U. S. S. Glacier sailed

"We're in Business" is Motto

LITTLE AMERICA V, Antarctica, March 10—Comdr. Herbert W. Whitney of Arlington, Mass., a short genial and spirited Seabee of 53, is fond of the phrase, "We're in business."

The fact is that Commander Whitney cannot resist the phrase when he is in the company of, for example, a dozen huge crates containing prefabricated housing units, a dozen men and a blueprint.

"We're in business," he says happily, and couple of hours later there is a brand-new 20-foot-by-48-foot structure standing on the spot.

Commander Whitney's job has the title of "Commander, United States Naval Bases, Antarctica." That is the Navy way of saying he is both officer in charge of this seventy-three-man winter base on the Ross Shelf Ice and a sort of absentee landlord of the Williams air base in McMurdo Sound.

In his twin capacity, he has the responsibility to make sure that when scientists arrive in these parts next season they will have observatories waiting at three different spots, here, at the South Pole and in Marie Byrd Land.

Construction is Commander Whitney's forte. He was contractor for heavy construction work in New England, when in 1942 he became a Seabee. He built military bridges and bases, then returned to civilian life. Four years later he was back in uniform.

Here he is concentrating his experience into making sixteen buildings as cozy as possible under frigid circumstances. All buildings have been connected by a enclosed arcade so that it is possible for a man, without stepping outdoors, to walk to the mess hall, recreation hall, laundry, and so forth.

In answer to the stock "How do you like it here?" Commander Whitney said: "We're ready for anything that may happen. With this swell base of ours, we're in business."

Antarctic Builder

Comdr. Herbert W. Whitney

ANTARCTIC AIDE KILLED

Tractor Driver Disappears Into Snow Crevasse

WASHINGTON, March 6 (AP)—The Navy reported today the second death in Operation Deep Freeze in the Antarctic.

Max R. Kiel, a mate, was killed when his tractor crashed into a deep snow crevasse. He was the son of Mrs. Roma Irene Kiel of Joseph, Ore.

A dispatch to the Navy from Little America said that Kiel had been driving in a tractor train carrying fuel oil drums from the coast to an inland base under construction for scientific studies in connection with the international geophysical year.

The tractor train encountered several crevasses, the worst one about fourteen feet wide and 110 feet deep. Kiel and other tractor men were filling the larger crevasses with snow when his vehicle plunged through surface snow into an undetected crevasse. The tractor and its driver dropped so far and fast thrrough the ice and snow that the body could not be recovered.

ABOARD U. S. S. GLACIER, in McMurdo Sound, March 7—A tractor train that left Feb. 27 on a 250-mile journey into Marie Byrd Land has been forced to head back to Little America V because of cracks in the ice.

Popular Base Commander

McMURDO SOUND, Antarctica, March 9—In the carefully considered opinion of ninety-two Americans, Lieut. Comdr. David W. Canham Jr., of Detroit, is one of the nicest things that could haven happened to them, in the Antarctic or anywhere else.

Commander Canham, a tall, indefatigable former mathematics teacher, 35 years old, is officer in charge of the Williams Air Station here, where the ninety-two will spend the Antarctic winter night. Seldom in the Navy or out of it, have a group of men taken to their boss as these men have taken to Commander Canham, and vice versa.

Commander Canham is not a construction worker by profession. He is a pilot. In his thirteen years in the Navy he has flown 3600 hours in all parts of the world, most of them prettier than the Antarctic. However, when the Navy called for volunteers for Operation Deepfreeze, Commander Canham, who as a teen-ager was an admirer of polar explorers, immediately raised his hand.

In the last few weeks, he has found that life in the Antarctic has not much in common with, say, life at Northwestern University, his alma mater, class of '41.

ANTARCTIC PARTY HITS ROUGH SEAS

Gale Buffets Icebreaker as Ship Enters Indian Ocean —Icebergs Are Peril

ABOARD U. S. S. GLACIER, off Wilkes Land, Antarctica, March 15—The Indian Ocean gave this Navy icebreaker a rough welcome today.

When the Glacier, the only United States ship now operating in the Antarctic, sailed into the world's third largest body of water, it encountered gale winds of more than forty miles an hour. At times the visibility was restricted to only a few hundred feet.

The worst hazard of all, however, were the dozens of icebergs, those treacherous cast-offs of Antarctica. They dotted the vessel's route and she was forced to go several degrees off course in order to keep a respectable distance between them and her bow.

Officers on the bridge could not see the icebergs because they were shrouded in a heavy mist. But the huge, floating menaces were picked up on the radarscope. The Glacier had to do so much broken-field running that shortly after lunch today the following announcement was made over the loudspeaker to the crew:

"The ship will be maneuvering through icebergs. All hands be prepared for heavy rolls."

Rolling with the elements, the Glacier—one of the few ships in history to sail these tricky waters—stuck to the plan outlined by Rear Admiral George J. Dufek.

U. S. Navy

Rear Admiral George J. Dufek, commander of Operation Deepfreeze I.

He ordered the icebreaker to proceed west to the 130th meridian and then to head south to the comparatively unknown coastline of Wilkes Land.

The commander of Task Force 43, whose flag flies from the Glacier, said today he was determined to survey the coastline between Long. 130 degrees E. and 105 degrees E a distance of about 800 miles, for a base site to support the United States role in the Antarctic phase of the International Geophysical year, 1957-58. The Glacier's position this afternoon was Long. 135 degrees E., Lat. 65 degrees S. The Task Force is the naval arm of the Antarctic expedition.

In proceeding westerly toward that point, the icebreaker sailed by the French outpost in Adélie Land without putting in for a visit. The ship was about 115 miles from the base that France plans to colonize with scientists to support her role in the Geophysical Year at 3:30 A. M. today.

Admiral Dufek said he would have liked to have exchanged in-person salutations with the French, but that the pressure of the coastal reconnaissance job and the lateness of the season combined to make the visit impossible.

BAY IN ANTARCTIC REJECTED AS BASE

Admiral Dufek Says Barren Wilkes Land Area Offers an Unsuitable Terrain

ABOARD U. S. S. GLACIER, in Porpoise Bay, Antarctica, March 16—This U-shaped bay area in Wilkes Land today was scratched off the list of possible base sites for supporting the United States' role in the Antarctic phase of the International Geophysical Year, 1957-58.

The 50-mile by 50-mile bay, the first to be examined in the current base reconnaissance of the Wilkes Land coastline, was rejected for a variety of reasons after it had been investigated by Rear Admiral George J. Dufek, commanding officer of the naval arm of the polar expedition.

Twice the Admiral flew over the barren region of the North Coast areas in a helicopter scouting for a piece of land or even a piece of suitable ice that could be turned into the foundation of an outpost. Twice he returned to the icebreaker Glacier without a good word for the terrain he had surveyed.

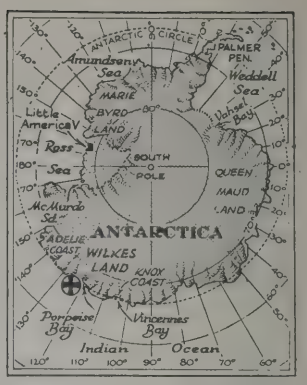
"There isn't a piece of exposed land in the vicinity," the Antarctic veteran said. "It's featureless. And as for the ice, it's so heavily crevassed that I wouldn't wish it on my worst enemy."

Discovered in 1840 by American explorers under Lieut. Charles Wilkes, Porpoise Bay is a 2,500 square mile indention in the Antarctic coastline at roughly Long. 129 degrees E., Lat. 66:30 degrees S. Several glaciers pouring down from the 10,000-foot polar plateau terminate in the bay.

These glacier tips break off periodically and become icebergs.

The icebreaker Glacier found the bay today to be a hangout of dozens and dozens of these giant chips of Antarctica. The glaciers, in pushing down toward the edge of the bag, create an enormous pressure that in turn produces crevasses.

Within seconds after Porpoise Bay had been ruled out as a possibility, Commander Eugene



BASE PLAN DROPPED: Porpoise Bay (cross) was found unsuitable for use as a U. S. Antarctic outpost.

H. Maher of Ogden, Utah, skipper of the Glacier, resumed the search for a suitable base site. The icebreaker, racing to complete the reconnaissance assignment in the closing days of the Antarctic work season, will explore about 800 miles of coast, from Porpoise Bay to Vincennes Bay, in the Knox Coast area.

The Navy icebreaker today proceeded to what was believed to be the farthest point south ever recorded in Porpoise Bay. According to the "Sailing Directions for Antarctica," which is published by the United States Navy Hydrographic Office, Porpoise Bay was discovered by the brig Porpoise when "she reached the position of Lat. 64:24 degrees S., Long. 130:36 degrees E."

Although vessels of other nations have gone south of that latitude in this area, officers aboard the Glacier believed none ever had penetrated as deep as did this ship today. Her most southerly position was Lat. 66:41 degrees S., Long. 128:25 degrees E.

U. S. EXPEDITION SEES 1ST SOUTHERN LIGHTS

ABOARD U. S. S. GLACIER, off Wilkes Land, Antarctica, March 14—The Antarctic sky put on an eerie show early today.

Brilliantly strewn with stars, the black sky seemed to have a band of light, glowing with fragile luminosity, at a point where it met the waters of the South Pacific. Several parallel shafts of light emerged from the band and disappeared among the stars.

The celestial show was the aurora australis—the southern lights—and it was the first display observed this season by the 350 men aboard this Navy icebreaker.

The aurora australis, which corresponds to the aurora borealis of the Northern Hemisphere, is one of several scientific fields that will be investigated during the international program to study the earth and its atmosphere.

Byrd Heads New Antarctic Unit

WASHINGTON, March 11—The Administration has set up an Office of Antarctic Programs that possibly could lead to laying claims to parts of the vast continent of ice.

The new office which will try to develop a consistent Antarctic policy, will report through the Defense Department to the Operations Coordinating Board. This is the agency the President relies on to see that decisions of the National Security Council are carried out.

Rear Admiral Richard E. Byrd, back in the country after a recent trip to the Antarctic, will direct the new agency from a basement room of the old brownstone house occupied by the board across from the White House.

ADMIRAL BYRD BACK FROM THE ANTARCTIC

MIAMI, Fla., March 6 (Æ)—Rear Admiral Richard E. Byrd, director of the United States Antarctic expedition, arrived here by plane tonight en route to Washington.

The admiral, who had reached Panama earlier in the day aboard the liner Rangitata from New Zealand, told news men he would discuss in Washington claims to land in Antarctica.

Admiral Byrd said the Russians had not made any claims to the land they planned to explore.

"What scanty relations we have had with the Russians in Antarctica have been harmonious," Admiral Byrd said. He noted that there had been three encounters with the Russians in Europe before the expeditions went south. Communications with expeditionary forces must pass through Washington before they reach the Russians.

U.S. BIDS RUSSIANS MAKE POLAR VISIT

Ice and Weather Force U. S. Vessel to Drop Search for Site for the Japanese

ABOARD U. S. S. GLACIER, off Knox Coast, Antarctica, March 20—Rear Admiral George J. Dufek today invited the Soviet Antarctic expedition to visit the two United States outposts constructed in the Antarctic this season.

A message to that effect was radioed during the night to the Russian ship Ob by the commander of Task Force 43, the naval arm of the United States Antarctic party. The admiral is now aboard this Navy icebreaker.

Besides relaying information on ice conditions along the Pacific coast of the South Polar continent, Admiral Dufek said, "The facilities of our bases are placed at your convenience."

Admiral Dufek's dispatch stemmed from one from the Ob received Sunday night by the Glacier, requesting details on ice conditions. That message was relayed by way of a weather station in Wellington, New Zealand.

It was on the basis of a Wellington weather summary, based on meteorological data radioed by ships sailing in the Antarctic area, that the Glacier learned early Sunday she had passed the Ob.

This probably had occurred Friday at a distance of about fifty miles.

The Russian dispatch was first answered by the skipper of the Glacier by way of Wellington. In addition to detailing ice conditions he said, "Regret missing you, and time does not permit arranging a rendezvous."

Admiral Dufek's message, also sent by way of Wellington, was a follow-up.

It went out as the Glacier was steaming roughly in the direction of the base the Russians had built this season in the Queen Mary coast area. The ship was expected to pass about 150 miles north of the Soviet base during the early morning hours.

In the last twenty-four hours, the Glacier surveyed the Windmill Islands in Vincennes Bay along the Knox Coast. Of several areas investigated in the last week, Admiral Dufek said, the Windmill Island group offers the best possibilities for a base along the Wilkes Land coastline.

ABOARD THE U. S. S. GLACIER, off Queen Maud Land, March 24—Ice, fog and wind prevented this Navy icebreaker today from reconnoitering the Prince Harald Coast for a potential base site to support Japan's role in the International Geophysical Year 1957-58.

After a five-day, 2,400-mile journey from the Knox Coast, the Glacier arrived off Queen Maud Land this morning to carry out an assignment for which Task Force 43 had volunteered: to search the little-known coast for a site where the Japanese might set up a base in connection with the eleven-nation network of Antarctic stations that will participate in the international investigation of the earth and its atmosphere.

According to the latest plans available here, Japan is scheduled to build a year-round observatory on the Prince Harald Coast at about Lat. 69 degrees 30 minutes S., Long. 37 degrees 30 minutes E. She also is expected to man a second base, during the summers only, on Peter I Island.

The Glacier, here to support the United States' program in preparation for the International Geophysical Year, ran into a succession of typically Antarctic obstacles.

The icebreaker, proceeding on a southewesterly tack, ran into heavy pack ice in Luetzow-Holm Bay area, at a point about 100 miles from the Prince Harald coast.

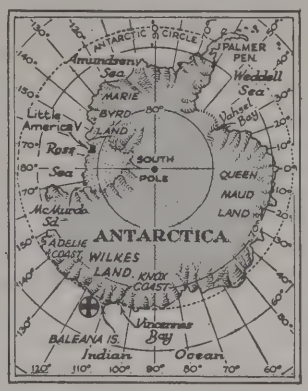
A helicopter was to try to find a path through the iceberg-strewn pack, but fog swept the area and the flight was called off. And a storm with winds up to thirty-five miles an hour began stirring up heavy seas off Queen Maud Land.

The upshot was that Admiral George J. Dufek, commander of Task Force 43, canceled the survey.

"While I would have liked to survey the area for the Japanese to give them a sort of head start before they arrive here next season," he said tonight, "the lateness of the season, coupled with the fact that the Glacier must still survey the coastline for a United States base site, makes it impossible to spend time here waiting for the weather to clear up."

Although her whalers operate in Antarctic water, Japan has not sent an exploratory expedition south of the Antarctic Circle since the pre-World War I period. In the 1911-12 season, Lieut. Choku Shirase, sailing the Kainan Maru, landed at a bay in the Ross Shelf Ice. Namedfor his ship, Kainan Bay serves today as a harbor for Little America V, one of the two United States outposts constructed this season.

Ships of 3 Nations Visit Same Antarctic Islands



BALAENA ISLANDS, Off Budd Coast, Antarctica, March 18—The United States Navy landed on one of these rarely visited islets off Antarctica today only to discover that the Russians had been there nine days earlier.

But the Russians must have been just as surprised when they landed March 9 to discover the Australians had been there almost two months before — on Jan. 19. In fact, the Australians left behind a to-whom-it-may-concern note proudly announcing: "Welcome to Australian Antarctic Territory! The first landing in this place was made from the ship Kista Dan."

Records of the Australian and Soviet units were found in a bottle.

A visit to rocky and remote Balaena is only one of several developments today for the Glacier, the last ship of Operation Deepfreeze still in the Antarctic. Breakfast began with the icebreaker discovering indirectly she had sailed in the last few days within fifty miles of the Soviet expeditionary ship Ob without having been aware of it.

U. S. FLAG PLANTED BY GLACIER CREW

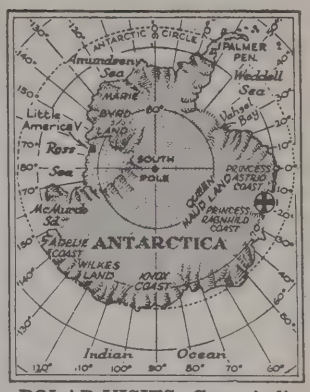
Remote Antarctic Is Visited by Ship Seeking Bases— She Enters Atlantic

PRINCESS RAGNHILD COAST, Antarctica, March 26—The Stars and Stripes flew tonight at two remote points along the coast of Queen Maud Land as the U. S. S. Glacier continued her exploring mission.

The Navy icebreaker is searching for sites for potential bases to support the South Polar program of the International Geophysical Year 1957-58.

The busy day of flag-raising may have significance in the event the United States initiates claims for Antarctic areas.

The first flag was unfurled on a pole hammered into the shelf ice of the Princess Astrid Coast at Lat. 69 degrees 54.9 minutes S., Long. 19 degrees 11 minutes E. The second pole was at Lat. 70 degrees S., Long. 20 degrees 57 minutes E. The two points are thirty-seven nautical miles apart in territory claimed by Norway. In both instances the Glacier made what members of the United States expedition believed to be the most southerly penetration of these coastal regions.



POLAR VISITS: Cross indicates Antartcic areas that U. S. expedition explored.

Attached to each pole was a brass capsule containing a note beginning: "A landing party from the U. S. S. Glacier, a unit of United States Task Force 43, operating in the Antarctic during Operation Deepfreeze I," investigated the adjacent land and sea areas."

Both Princess Astrid and Princess Ragnhild Coasts are part of comparatively unknown Queen Maud Land, ranging from about Long. 20 degrees W. to Long. 45 degrees E., which has been claimed by Norway since 1939. The Astrid Coast begins at Long. 5 degrees E. and ends at Long. 20 degrees 30 minutes E., where the Ragnhild Coast picks up. It ends at Long. 34 degrees E. Both stretches are about 300 miles long.

Although numerous United States expeditions have explored well over 1,000,000 square miles of Antarctic territory, the United States has never laid claim to any part of the 6,000,000-square-mile continent. Its position consistently has been that it does not recognize the claims of the other nations concerned and reserves all its rights in the Antarctic. If Washington decided to change this position, the explorations carried out by the Navy this season probably would strengthen its bargaining position.

Caribou Herd Declines

OTTAWA, Jan. 18 (AP).—The Caribou herd to which Eskimos and Indians of the Northwest Territories look for food and clothing declined from 668,000 in 1948 to about 300,000 last year A special federal-provincial committee is studying ways to combat the decline.

Last U. S. Ship Quits Antarctica, Ending One Phase of Expedition

ABOARD U. S. S. GLACIER, off the Princess Astrid Coast, March 27—This Navy icebreaker was back in the Atlantic today after a frigid absence of four months, two weeks and six days.

The only United States ship now operating in the Antarctic, the Glacier left the Indian Ocean during the night. To the 360 men aboard the change was academic—it still was 9,700 nautical miles to Boston, the ship's home port, where she is due May 6.

Originally she was due there April 16, but additional assignments in the Antarctic set back her timetable.

ABOARD U. S. S. GLACIER, off Princess Martha Coast, Antarctica, March 29—The seagoing support phase of Operation Deepfreeze I ended tonight with the raising of the Stars and Stripes at Atka Bay on the coast of Antarctica's Queen Maud Land.

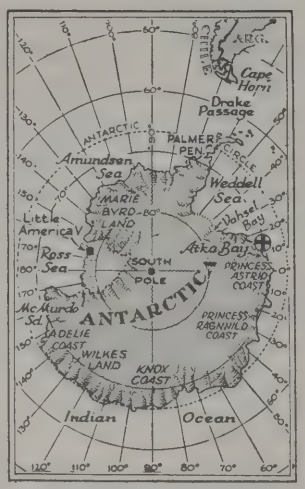
The 1955-56 Navy expedition in support of the United States' Antarctic role in the International Geophysical Year, 1957-58, came to a close when this icebreaker, the first Navy ship to arrive in Antarctica this season and the last to leave, began the long voyage home.

The Glacier reached the Antarctic on Dec. 17. Six other vessels of Task Force 43, the naval arm of Operation Deepfreeze I, left weeks ago. The Glacier embarked on the 12,000-mile journey to Boston via South America and the West Indies after Rear Admiral George J. Dufek cancelled a plan to conduct a base reconnaissance survey of the Filchner Shelf Ice of the Weddell Sea.

The lateness of the season, coupled with the fact that the Glacier is due in Montevideo on April 7, unfortunately makes it impossible to carry out the survey, the Admiral said.

The United States plans to establish a base on the Filchner Shelf Ice, and the selection now of a possible site for the outpost would have given the planning group in Washington a head start on the project. Today's decision means that the site will be chosen next season at the start of Operation Deepfreeze II, and that the construction of the outpost will begin immediately thereafter.

The Weddell Sea station is one of five scientific outposts the United States plans to set up to support its four-year Antarctic program in connection with the Geophysical Year. Two wintering over outposts manned by a total of 166 men—at Little America V and in McMurdo Sound—were established this season.



The Atka Bay region (cross)

The United States flag was raised during a one-hour stopover at Atka Bay. A brass cylinder attached to the flagpole contained a mimeographed note saying that a landing party from the Glacier had "investigated the adjacent land and bay area." Whether the next visitors to Atka Bay will find the flag is a question only the Antarctic can answer.

The flagpole was set in what appeared to be a piece of shelf ice that was well along in the process of calving, that is breaking off from the shelf and going out to sea as an iceberg. It was the third inland flag-raising in four days of base reconnaissance operations along the coast of Queen Maud Land, a segment of the Antarctic Continent that has been claimed by Norway since 1939.

On Monday the Glacier left a flag on the Princess Astrid Coast, and another on the Princess Ragnhild Coast, at points 37 nautical miles apart.

Admiral Dufek described the journey to Atka Bay as "fact-finding in nature." He said the site left much to be desired as a base area but added that the trip to the bay was valuable because it proved that ships could get through the pack ice and reach the coast this late in the season.

"We have shown that ships can operate here from mid-December until early April instead of only to the end of February," he said. "We have found that the working season in the Antarctic can be stretched at least a month."

ANTARCTIC DATA IS GAINED BY U. S.

Scientists With Geophysical Expedition Have Added to Knowledge of Region

ABOARD THE GLACIER, at Sea, March 30—About a dozen United States scientists have used Antarctica as an outdoor laboratory in an effort to increase their knowledge of the world's least known 6,000,000 square miles. They gave the fringes of the icy continent a thorough scientific examination and will be busy months, perhaps years, studying their findings.

During the past three months in the Antarctic, the scientists were constantly on the go. It was routine to see a geologist returning from an afternoon of field work with a rucksack full of rocks, a marine biologist with a catch of deep-sea invertebrates or an ornithologist with an armful of reluctant penguins.

On one occasion a scientist returned empty handed. He had searched an islet off Wilkes Land for radioactive minerals, but his detection equipment had not picked up a thing.

None of the scientists raced across the snow this season shouting exultantly. But their collective findings will help raise the curtain of obscurity that still veils a continent that is buried under about 85 per cent of the world's glacial ice.

Actually the more intense investigation of Antarctica won't begin until next season when eleven nations will begin joint Geophysical Year studies from about fifty stations. The United States plans to operate five such stations, including one at the South Pole. The emphasis this season of Task Force 43, the naval arm of the United States expedition, had been on building bases so that when additional United States scientists arrive in Antarctica next season they will be able to move in and go right to work.

Despite the accent on construction, the scientists accompanying Operation Deepfreeze I succeeded in accomplishing valuable work.

The Rev. Daniel Linehan, S. J., Boston College seismologist, determined the thickness of the ice at several points around the continent. By taking seismic soundings—setting off explosives on the ice and measuring the resulting echoes—he discovered that a section of the Ross Shelf Ice, on which the base at Little America V was constructed this season, was about 800 feet thick. The shelf here floats on about 1,250 feet of water, he reported.

On investigating a gravel-covered section of the Cape Royds-Cape Barne area, which was being surveyed to determine the feasibility of establishing an airstrip there, Father Linehan discovered the gravel layer was too thin to support a runway. A seismic check, he said, disclosed about 100 feet of glacial ice hidden under a foot or two of gravel. The site was abandoned.

In geology, Charles R. Lewis of Falls Church, Va., collected a few hundred pounds of rocks, predominantly glacial erratics, in an effort to learn about the geological changes that the Antarctic either has undergone or is now undergoing. His most interesting experience, he said, was discovering shells imbedded in consolidated volcanic ash on the side of Mount Bird, Ross Island, at about 500 feet above sea level. It would indicate that the island had risen at least that much out of water within recent geological time, he said.

Besides ice and rock, a variety of other subjects, including the upper vertebrate, were investigated. A study dealing with the physiological reaction of the human body to cold weather stresses was conducted for the Office of Naval Research by Drs. Howard G. Parker, a physician, and Burton E. Vaughan, a physiologist, both of the University of California. They studied their Seabee subjects for 12,000 miles, from Nashville, R. I., to Hut Point, Ross Island.

Other scientists were busy conducting cosmic ray and upper atmosphere studies, taking visual observations of the Aurora Australis, doing oceanographic work, banding penguins in an effort to learn their migratory habits and studying the habitat of fishes in the Antarctic seas.

One rare Ross seal was shot and is being taken back to the United States in the Glacier for delivery to the Smithsonian Institution in Washington.

The first ship to return to New York from the recent Antarctic expedition docked in Brooklyn March 28

The Greenville Victory arrived shortly before noon with her sides scarred with rust where grinding ice floes had scraped away the gray paint.

A Navy band played, and wives and children cried a welcome to the men they had not seen for five months. First to debark on the drafty pier at Fifty-eighth Street and First Avenue was the ship's master, Capt. Leopold Duchowski.

Highlight of the Greenville Victory's voyage home was the rescue on March 3 of the Peruvian balsa log raft, Cantuta, and her five passengers. The Cantuta was trying to drift across the South Pacific when adverse currents delayed her and food and other supplies grew short.

U. S. POLAR VESSEL DOCKS IN URUGUAY

Crew of Icebreaker Glacier Visits Civilization Again After Antarctic Trip

MONTEVIDEO, Uruguay, April 6—The U. S. S. Glacier arrived here today after having participated in the United States' most ambitious expedition to Antarctica.

Civilization in the form of women, childre , taxis, buildings and money changers was on display just over her bow, and the 360 men aboard no longer had any doubt that the Glacier's four-month role in the Antarctic had ended. The temperature was about 70 degrees, a far cry from the Antarctic's sub-freezing readings.

The Soviet whaling ship Slava, trailed by some of the vessels of her fleet, pulled into port about the same time as the Glacier. Observing the custom of a merchant ship's dipping her colors to a naval vessel, one of the Soviet ships gave the United States icebreaker a flag salute. The Glacier promptly returned it.

The Glacier, the lead ship of the Navy's seven-ship task force that supported the United States expedition, arrived here after a busy season off Antarctica. She broke millions of tons of ice, hauled cargo, raced to New Zealand and towed back a small tanker, and in her final assignment, she sailed 6,300 miles from the Pacific to the Atlantic coast of Antarctica on a base reconnaissance mission.

The Glacier, commissioned last May, is in the process of completing a round-the-world maiden voyage. She will remain in Montevideo until Tuesday. She then will depart for Boston, arriving there May 6, after stops at Rio de Janeiro, Barbados and Norfolk, Va.

Made up of 1,800 men, fourteen planes and 9,235 tons of cargo, the seven-ship task force concentrated on laying the groundwork for a far-flung network of United States stations.

All the operations were under the command of Rear Admiral George J. Dufek, who arrived here aboard the Glacier.

Operation Deepfreeze II will get under way in November, with the construction in the early stages of the season. Up to thirteen long-range planes, including big Air Force C-124 Globemasters, will fly from New Zealand to the Antarctic to aid in the building of two additional outposts, one in Marie Byrd Land and the other at the South Pole. The Little America V wintering-over group will construct the Byrd station, the McMurdo Sound group the other.

The Byrd station calls for the transportation by tractor-train of 550 tons of cargo over several hundred miles of hazardous terrain from Little America V, and the planes are expected to provide reconnaissance support along the route. It originally was planned to erect this 25-man station at Lat. 80 degrees S. and Long. 120 degrees W. but a trail-blazing party this season went only about 400 miles into the interior. A decision on the exact location of the station is expected during the summer.

As for the construction of a 15-man South Pole station, it perhaps is the most challenging job ever undertaken in the Antarctic. It involves the landing of big, ski-equipped planes on a 10,000-foot-high polar plateau and the airdropping of 500 tons of cargo. The pole is about 808 miles from the McMurdo base.

While these construction operations are under way in November and December, a task force carrying a small army of United States Geophysical Year scientists will be approaching the coastline of Antarctica from three directions. One group will proceed from New Zealand to the Ross Sea with supplies for Little America V and the McMurdo station. The second group will sail either from Australia or New Zealand to the Knox Coast area to establish a base. A third group will sail from South America to set up still another geophysical station. Altogether the United States plans to establish five such outposts.

As soon as these stations are constructed the scientists will begin studies in such geophysical fields as meteorology, glacialogy and ionospheric physics. All the stations will be re-supplied by Operation Deepfreeze III in the 1957-58 season and by Operation Deepfreeze IV in the final 1958-59 season.

Although scientific data is the immediate aim of the International Geophysical Year nations, the factors of exploration and occupancy may have important political significance in the future. The outposts labeled scientific stations during the Geophysical Year may some day be turned into strategic footholds. The Russians, who set up a station this season in the Queen Mary Coast area, have indicated in the past that they would not like to be forgotten if the continent should be carved up.

NEW ZEALAND GAINS FROM POLAR UNITS

AUCKLAND, New Zealand, June 30—The Antarctic has become an important source of dollars to New Zealand.

Ships and aircraft of the United States Antarctic expedition, which will pass through the country in October on the way to McMurdo Sound, are expected to add more than $1,000,000 to New Zealand's foreign exchange funds through supply and personal purchases.

This estimate does not include continued spending by personnel left on service and maintenance tasks in New Zealand, and likely heavy spending by expedition members returning after months away from civilization.

Four icebreakers and five cargo ships, four Skymaster aircraft, four Neptunes, and two Dakotas will land in New Zealand on the way to the Antarctic. Eight Globemasters will be based in the country while conducting a shuttle service to the polar regions.

There will be at least 2,500 men in the various groups in transit. In addition a camp will be built at Weedons air station, near Christchurch, for 250 maintenance personnel. They will be working on the Globemasters based near-by.

Antarctic Vessel Back Home

BOSTON, April 21 (AP)—The U. S. S. Edisto returned to her home port here today after a six-month voyage to the Antarctic and back in Operation Deepfreeze. A crowd of relatives and friends and a Navy band welcomed the crew of 360 men. The Edisto landed hundreds of tons of cargo in Little America I.

Eastwind Greeted at Boston

BOSTON, May 9 (AP)—The Coast Guard cutter Eastwind, six months in the Antarctic, docked here today. About 500 relatives and friends lined the Castle Island pier as the vessel came home from Operation Deepfreeze. The Eastwind is on her way to the Portsmouth, N. H., naval shipyard for refitting before a trip to the Arctic.

SOVIET SKIPPER VISITS U. S. SHIP

Whaling Fleet Captain Chats With Admiral Dufek About Antarctic Operations

ABOARD U. S. S. GLACIER, at Montevideo, April 7—The captain of the Soviet whaling factory ship Slava visited this United States Navy icebreaker today.

Accompanied by four members of his staff, Captain Alexei Solyanik spent more than an hour in a cheerful across-the-table conversation with Rear Admiral George J. Dufek and his Antarctic expedition staff. The two men exchanged gifts. The captain presenting the Admiral with a carton of Russian cigarettes and the Admiral reciprocated by giving the Soviet skipper two books—one about whales and the other about ice navigation.

During their 81-minute visit the two men talked, mostly about what the two ships had been doing in the Antarctic. Admiral Dufek gave a summary of the Glacier's operations.

Captain Solyanik, a square-set man who is 43 years old, said the Slava and her fleet of about a dozen whaling vessels had had a good season of hunting in the world's greatest whaling waters. More than 2,800 whales were killed, he said, adding that the catch had yielded about 26,000 tons of whale oil.

The Slava, he said, had placed fourth-highest this season among the nineteen whaling factory ships that had operated in the Antarctic.

The Soviet captain said that during World War II he had served for two years on the United States west coast as a representative of a mission responsible for repairs being made there on Soviet ships. He said he now was returning from his tenth whaling trip to the Antarctic in ten years.

Discussing his operations Captain Solyanik said the total crew of his whaling fleet came to 758 persons. Included, he added, were thirty-one women, one of whom was a dentist. The others were mostly stewardesses.

The Slava is the only Soviet factory ship conducting whaling operations in the Antarctic. She is about 500 feet long and displaces about 30,000 tons. Prior to World War II the ship was part of the German fleet, but after V-E Day she was turned over to the Soviet Union as a result of reparations negotiations.

Captain Solyanik said he understood that the Antarctic base set up by the Soviet Union this season to support its role in the Geophysical Year has a wintering-over party of about eighty-three men. The base, situated in the Queen Mary Coast region, was visited earlier this year by the Australian Antarctic expedition, he said.

MONTEVIDEO, Uruguay, April 9—Rear Admiral George J. Dufek and a group of United States Navy officers visited the Soviet whaling factory ship Slava today and were treated as if they were long lost brothers.

First, Captain Solyanik took the dozen Americans on a tour of his 500-foot ship. He then served a huge breakfast, including vodka and champagne, and drank a toast to "friendship." When he got around to saying good-by, he said it by presenting to his guests gifts ranging from caviar to whale's teeth. Soviet-United States relations could not be any happier than they were on the Slava today between 9 and 11:15 A. M.

ANTARCTIC BATTLE WITH ICE RELATED

British Party Leader Tells of Theron's 4-Week Test in Weddell Sea Pack

The following article was written by the leader of the main party of the British Antarctic Expedition. It describes the troubles of the expedition ship, Theron, which freed herself Tuesday after having been stuck in the ice of Weddell Sea for four weeks en route to a proposed British Antarctic base at Vahsel Bay.

By DR. V. E. FUCHS

World Copyright by The Times, London.

ABOARD S. S. THERON, Antarctica, Jan. 24—Today, after thirty-three daysbattling with the notorious ice of the Weddell Sea, we know what we shall once more steam in open water. We shall be able to travel freely eastward before making a new attempt to reach the Caird Coast.

For three weeks (after turning northeastward Jan. 1 to seek open water) we fought the ice day and night. The Theron has proved herself a worthy vessel, repeatedly smashing floes eight to ten feet thick. But inevitably she became trapped again and again in floes no icebreaker could have attempted.

Another factor that often held us was the great thickness of soft snow lying on the surface. On being dislodged into the water this formed a thick paste-like icing and prevented the movement of either the ship or the ice she was breaking.

Then would go up the cry: "Polers over the side!" Everyone would jump on to the ice with shovels, axes, boathooks, crowbars and even plain boards. Tons of soft snow and sludge were then dug away, releasing huge fragments of ice from beneath the ship.

When a particular ice floe was too thick, or the bows of the ship became jammed in the ice, one or more charges of explosive were lowered into the water through tubes or thrown down on long poles and fired.

On Jan. 15 we were still beaten by floes one or two square miles in extent and up to twelve feet thick. It was on this day that we received a radio call from H. M. S. Protector, a frigate-type patrol ship of the British Navy, then near Graham Land [the British name for Palmer Peninsula], 1,000 miles to the west, asking if we would like a reconnaissance of the ice to the north of us. As it was impossible for us to find any water from which to fly our seaplane, we accepted the offer. The Protector had to refuel first and she could therefore not reach the ice to the north of us before Jan. 22.

We continued working the Theron toward the north. On Jan. 20 we found a pool of open water 350 yards long and, with some anxiety, we watched the seaplane take off with only fifty yards to spare. The flight lasted three and a quarter hours and provided the key to our release.

As the pilot reported by radio telephone, his course and his description of the ice were carefully plotted.

On his return, we made haste to follow the reported route. Unfortunately we were soon caught in renewed ice pressure, which delayed us thirty-six hours while it rafted high against the ship on both sides. This effect was increased during the morning of Jan. 22, when a stray northeast blizzard kept the ice on the move. But that afternoon the wind fell and it was suddenly possible to move the ship.

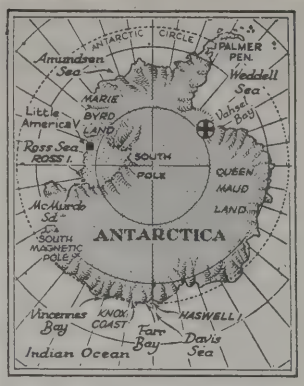
By now H. N. S. protector was moving toward the edge of the pack some seventy miles to the north of us.

The Theron continued to move steadily all last night [Monday, Jan. 23] and by this morning our general speed had increased to 3 knots. By 11:30 A. M. a helicopter from the Protector flew over the ship and reported that we were forty miles from the open water.

We were then steaming steadily through close light pack ice at about 6 knots and have continued to increase speed as the ice becomes more dispersed. In a few hours we expect to join the Protector in open water. We shall then make our way eastward, following the edge of the ice pack before turning south once more along the Caird Coast to find a base site.

British Information Service

BRITISH EXPLORER: Dr. Vivian E. Fuchs, who is the leader of Antarctic group heading for the Caird Coast.



BRITISH REACH COAST: The expedition ship Theron arrived at a proposed base site near Vahsel Bay (cross).

LONDON, Jan. 30—The British ship Theron arrived at a base site in Antarctica today. The ship reached the continent after a four-week battle against Antarctic ice.

A spokesman at headquarters here for the British trans-Antarctic expedition quoted the first radio message indicating that the Theron had reached its goal near Vahsel Bay. The message, signed by the expedition's leader, Dr. V. E. Fuchs, said:

"Shackleton post office established at 30 minutes past midnight today, 30 January."

Later messages said the site was twenty-five miles west of Vahsel Bay, on a ledge of the 115-foot wall of shelf ice that seals off the southern and western shores of the Weddell Sea. The base is named for Sir Ernest Henry Shackleton, who commanded three Antarctic expeditions. He died in 1922.

Dr. Fuchs reported that all hands were working sixteen hours a day to unload 300 tons of stores from the Theron. The ship must return north in a month because the long south polar winter will freeze the coastal waters solid.

Radio messages received here by the secretary of the expedition, Rear Admiral C. R. L. Parry, said the base had been chosen by Dr. Fuchs after three aerial reconnaissance flights along the continental coast and the Filchner Shelf Ice.

Seventeen explorers in the party will remain at the base throughout the year to await Dr. Fuchs' return for the transcontinental expedition next winter.

Blizzard Hampers British

LONDON, Feb. 3 (AP)—A roaring blizzard forced Britain's Antarctic expedition to suspend unloading operations in the Weddell Sea for a day, a message from Dr. Vivian Fuchs, the expedition's leader, said today.

Dr. Fuchs reported that the blizzazrd flooded the sea and ice near the expedition's supply dumps last Wednesday. The explorers waded through icy water to save their stores. Conditions became so bad the supply ship Theron dragged her moorings and had to put out to sea.

ONE BRITISH GROUP AT ANTARCTIC SITE

Party on Ship Tottan Ashore at Coats Land

LONDON, Jan. 11—Members of one party of the British expedition to the Antarctic have berthed their ship at the ice near the coastline of the Weddell Sea.

A second party, in the ship Theron, is still in danger of being trapped in the Weddell Sea pack ice. The Theron, with Dr. Vivian Fuchs, chief of the British Trans-Antarctic Expedition, aboard, has made little progress for twelve days.

Both parties had hoped to land at the same time at Vahsel Bay, in the southwestern section of the Coats Land coast of Weddell Sea. From a base at Vahsel Bay, the British hope to start their expeditions across the Antarctic continent to McMurdo Sound.

The party from the motor vessel Tottan, which has berthed off Coats Island, is establishing a base that will serve for the work of the International Geophysical Year 1957-58. Stores are being taken ashore, huts will be built.

An extensive program of scientific observations has been planned for Britain's part in the world-wide researches of the International Geophysical Year. Proirity will be given at first to the collecting of meteorological data and the measurement of solar radiation.

The expedition's sponsors, the British Royal Society, said the Tottan party's position was at Lat. 75:36 S, Long. 26:45 W. This is 150 to 200 miles east of Vahsel Bay. It was considered satisfactory in view of the ice-bound condition of the Weddell Sea.

Ten scientists are in this Tottan party. The ship of 540 tons, is manned by a Norwegian crew.

Antarctic Continent Huge

The Antarctic Continent covers 6,000,000 square miles, of which less than half has not been seen even from the air.

8 BRITONS WINTER AT ANTARCTIC BASE

Fuchs, Returning on Theron With Rest of Party, Tells of Setting Up Station

LONDON, Feb. 22 — The Theron, headquarters ship of the British Trans-Antarctic expedition, is homeward bound from the newly established base of the expedition.

From the site on the Filchner Ice Shelf of the Weddell Sea, the expedition is next year to trek across the continent by way of the South Pole. Eight men were left to man the base through the long winter night.

Dr. Vivian E. Fuchs, expedition leader, has radioed an account of the advance party's fight against blizzards, fog and drifting pack ice as it searched for a base site and then unloaded 350 tons of supplies. Dr. Fuchs sent the report from the Theron, which is due in Montevideo, Uruguay, this week.

The Theron escaped Jan. 23 from the pack ice in the Weddell Sea that had held her fast for nearly a month. Cruising down Coats Land on the eastern shore of the Weddell Sea, she continued past the great Dawson Lambton glacier.

Vahsel Bay, at the eastern edge of the Filchner Shelf, where the British had hoped to set up the base, proved "certainly a place to shun," Dr. Fuchs reported. It was rimmed with crevassed glaciers and filled with sea ice.

The air search for a base site, previously unsuccessful, was directed westward, along the Shelf ice, which seals off the southern margin of Weddell Sea.

Unloading began Jan. 30 with the Theron anchored to twelve-foot-thick bay ice at the face of the Shelf. An 800-yard-long landing strip was laid out and the plane floats were exchanged for skis.

It will probably be the main center for the Antarctic activities of Britain in the multi-state researches of the International Geographical Year 1957-58, as Little America V is for the United States.

The unloading was completed Feb. 7 as a compressed mass of broken ice, ice sludge and water threatened to freeze in the ship.

There were hasty farewells to the men left behind in the wintering party, commanded by K. V. Blaiklock, a surveyor. R. A. Lenton is second in command. The others are R. H. A. Stewart, P. H. Jeffries and J. La Grange, meteorologists; D. Howard, engineer; E. Williams, radio operator, and Dr. R. Goldsmith, physician.

Dr. Fuchs plans to return to Shackleton Base next January to lead the main cross-continent expedition.

British Polar Vessel Back Home in London

LONDON, March 23—The Theron, headquarters ship of the British trans-Antarctic expedition, arrived home today. Her hull was dented and rusty from months of battering by ice packs.

Aboard her were Dr. Vivian Fuchs, leader of the expedition, and Sir Edmund Hillary, the New Zealand beekeeper who conquered Mount Everest and who heads a support party for the main expedition.

Both men have left advance groups on the Antarctic Continent to prepare bases and supply depots for the main expedition next winter.

Dr. Fuchs said he would leave here for the main expedition Nov. 14.

MONTEVIDEO, Uruguay, Feb. 24—The British scientist, Dr. Vivian E. Fuchs, and the New Zealander, Sir Edmund Hillary, conqueror of Mount Everest, arrived here last night from Antarctica.

They head the British Commonwealth party on the way back to Britain after leaving eight men to winter at the new base on the Filchner Shelf Ice of Weddell Sea.

Their ship, the 829-ton Theron, will undergo urgent repairs in England. Her bow was badly damaged by the crush of the ice pack. Dr. Fuchs said the ship had done 2,000 miles in the pack. The skipper, Capt. Harold Maro of Canada, said he much preferred the Arctic ice—it averaged a six-foot thickness while Down South the pack was eight to fourteen feet thick. The Theron is back with her crew of nineteen and eleven members of the expedition.

Dr. Fuchs said the new base, named for Sir Ernest Shackleton, was at Long. 77:56 S. Lat. 37:16 W.

British Sight New Mountains

LONDON, Feb. 9—A hitherto unknown mountain range has been sighted by a plane of the British Trans-Antarctic Expedition. A message made public today from Dr. Vivian I. Fuchs, expedition leader, said reconnaissance flights had revealed the range seventy-five miles east of Shackleton, the base at Vahsel Bay in the Weddell Sea.

Britons Report On Battle to Build Antarctic Base

By Reuters

London

Eight lonely Britons, living in a giant upturned crate in the Antarctic, have sent a radio message to London describing their life among the blizzards and perpetual night.

The eight men are the advance party of the Commonwealth Trans - Antarctic Expedition which will set out next year to trek across the unexplored "White Continent."

The message said that, muffled in furs against the 48-below-zero cold, they struggle to build a base for the main party. Working by lamplight, they have completed the framework of the main hut and are hammering the roof into position.

Blizzards dumped drifts 15 feet high and 50 yards long, burying many of the metal and wooden parts needed to build the hut.

The message said the men found it impossible to dig down to the equipment and had therefore had to tunnel through a hill of snow to reach it.

They sleep in tents but use the giant crate as a dining room. At one end of it a kitchen has been set up, at the other a radio station. From the ceiling hang drying clothes and snowboots.

Every day they have to dig themselves out.

The adventurers plan to finish their hut by June 21 when they will hold a midwinter celebration.

At the end of March they lost fuel stores and meteorological equipment in a sudden breakup of ice floes.

Coal supplies, a workshop, 130 drums of kerosene, 90 oil drums and weather equipment vanished into the icy waters.

But they still have enough food, fuel, and equipment to last until the main party arrives in January, 1957.

Their message said: "Humans and huskies happy and cheerful."

BRITISH POLAR RADIO ON

Coats Land Station Transmits First Message to London

LONDON, Feb. 26 (Reuters) —The main radio transmitter of the British Antarctic expedition in Coats Land has commenced operations, it was announced here tonight.

The first message from the station reported that one-quarter of the headquarters hut had been erected and members of the expedition were living in it. The party, under Lieut. Comd. David Dalgliesh of the British Navy, is preparing for scientific observations to be made in the International geophysical year 1957-58.

BRITAIN SETS UP ANTARCTIC POSTS

Establishes Two More Bases in Region Disputed With Chile and Argentina

LONDON, March 13—Britain has established two new Antarctic bases on islands off the west coast of Palmer Peninsula. Conflicting claims to the peninsula have been laid by the British, Argentine and Chilean Governments.

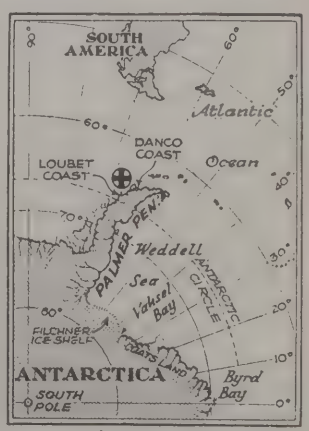
The Colonial Office announcement of the new bases today brings the total of British bases on and near the peninsula to twelve. Argentina has established eight bases and Chile six.

The bases were set up by exploration parties of the British Falkland Islands Dependencies Survey. Both establishments are small.

Palmer Peninsula is so called by the United States. It is known as Graham Land by Britain, O'Higgins Land by Chile and San Martin Land by Argentina.

According to messages received by the Colonial Office, the royal research ship Shackleton landed six men with stores and equipment on an island off the Danco Coast, near the end of the peninsula. The royal research ship John Biscoe landed twelve men to establish a base on an island off the Loubet Coast.

The first British bases in the area were established twelve years ago. In addition to survey work and scientific research they supply weather information for the benefit of whaling fleets and Antarctic exploration parties.



NEW BRITISH BASES: Antarctic outposts have been set up on islands off Palmer Peninsula (cross).

NEW ZEALANDERS CONQUER GLACIER

3 Antarctic Observers With U. S. Party Make 10-Day Trip Over Ferrar Ice

McMURDO SOUND, Antarctica, Jan. 28—Three New Zealanders returned tonight from a successful climb to the top of the Ferrar Glacier. It was the first time the long, ascending river of ice had been conquered since it was discovered and climbed by Capt. Robert F. Scott's Antarctic expedition of 1901-04. It took the three men, hauling 450 pounds of equipment on two sleds, ten days to make the arduous round-trip journey. The glacier is fifty miles long and 7,500 feet high at the point where it meshes with the snowy fringes of a vast polar plateau that is about three miles wide.

The New Zealanders came back to the warmth of the U. S. S. Wyandot, one of the seven ships that are part of Operation Deepfreeze, the United States role in the International Geophysical Year, 1957-58. The three men, who joined the expedition in early December as their country's observers of Operation Deepfreeze, are Trevor Hatherton, 31-year-old geophysicist from Wellington, the leader of the group; Lieut. Comdr. William J. Smith, 33, a Royal New Zealand Navy man from Christchurch, and Bernard Gunn, 28, a geologist from Dunedin.

In recounting the story of the climb they told of a battle against walls of ice, zero temperatures and seventy-mile-an-hour winds. The New Zealanders said their job had been to get information for the expedition their country plans to send to the McMurdo Sound area next season. It will be the first time that the Wellington Government, which since 1923 has claimed a 175,000-square-mile slice of Antarctica, has sent a group to the world's least explored continent. This segment of Antarctica is called the Ross Sea Dependency by New Zealand.

With Sir Edmund Hillary, the conqueror of Mount Everest, as leader, the twenty-two-man team will have a twofold mission: to support New Zealand's role in the Geophysical Year, and to make the Ross Sea area the terminal for a British group led by Dr. V. E. Fuchs that will attempt the first transcontinental journey on land. Using tracked vehicles, the group will begin an 1,800-mile trek from the Weddell Sea in the 1957-58 season.

Speaking for the New Zealand group, Mr. Hatherton said their 135 miles of exploration had answered several important questions dealing with both New Zealand's base here next season and the planned trans-Antarctic crossing. For one thing, he said, a suitable base area had been found that would be recommended to Sir Edmund.

The potential base area, Mr. Hatherton said, is in a new harbor area at the foot of a mountain slope that forms part of the southern wall of the Ferrar Glacier.

Mr. Hatherton said the ice was so hard—"we broke eight crampons [climbing irons], on it"—that it was unsuitable for dog teams. The New Zealand expedition had been hoping to use dogs to transport food and equipment to the polar plateau. There the gear would be organized for the incoming Fuchs party. It now appeared, Mr. Hatherton said, that the two small planes accompanying the New Zealand expedition would have to be used to fly both the dogs and the gear to the top of the plateau. The dogs could take over from there.

Mr. Hatherton and his colleagues expressed their gratefulness to the United States Navy for lending valuable support for their climb. Of the 450 pounds of equipment they carried, the Navy had provided about 400 pounds—250 of food and 150 of miscellaneous gear.

NEW POLAR BASE URGED

New Zealand Suggests U. S. Join in Such a Project

AUCKLAND, New Zealand, May 10—The establishment of a joint United States-New Zealand scientific base at Cape Adare, Antarctica, early next year, has been proposed here.

Dr. M. A. F. Barnett, Director of Meteorological Services and chairman of the New Zealand Geophysical Year Committee will visit Washington with a few weeks for discussions on the Cape Adare base.

New Zealand Base in Antarctic Sought in McMurdo Sound Area

Observers With the U.S. Party Are Said to Favor One of Two Glacial Sites

Dispatch of The Times, London.
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LONDON, March 22—During the last two months three observers with the United States' Operation Deepfreeze in the Antarctic have been surveying the McMurdo Sound area for possible base sites for the New Zealand expedition.

The New Zealand expedition, to be led by Sir Edmund Hillary, will support Dr. Vivian E. Fuch's British expedition primarily by establishing a food and fuel depot as close to the South Pole as possible.

The survey has been carried out in three phases—a five-day sledging trip to the western and southern coasts of McMurdo Sound, undertaken by Dr. Trevor Hatherton and Lieut. Comdr. W. J. L. Smith; an aerial photographic reconnaissance of the mountains and glaciers of the western ranges by Bernard Gunn; and a detailed ten-day reconnaissance of the Ferrar Glacier by all three men.

The sledging trip was concerned mainly with finding a base site. Dry Valley and Butter Point were the principal alternatives. Hut Point, Cape Evans and Cape Royds, will be used only in the last resort.

All things considered, Butter Point seems to have the most advantages provided the Ferrar Glacier route is used. The slopes are very gentle, and the flat ice can be used as an air strip if the bay ice moves out. Directional antennae also would have a clear view, unobstructed by mountains.

The first survey team was doubtful about the site, because it seemed to consist entirely of ice, the movement of which, however small, would disturb seismographs and similar instruments. On the combined trip to the Ferrar Glacier, however, a moraine-covered rock shelf was found, which makes the site as near ideal as could be expected.

The main purpose of Mr. Gunn's aerial reconnaissance of the western ranges was to compare the respective advantages of the Koettlitz and Ferrar Glaciers as routes to the polar plateau. Photographs also were taken of the Skelton Glacier, the Shackleton Glacier and some smaller ones.

The Skelton Glacier seemed to be the best of any so far considered. The approach lies from Hut Point across flat, permanent sea ice. The surface is of unbroken snow, and though it is divided part of the way up by a rock formation, the northern arm is practically unbroken.

Three observers surveyed an Antarctic area (1 to 2) for sites for bases for the New Zealand expedition.

Expedition to Check Depth of Polar Ice

By the Associated Press

Los Angeles

Seismic tests will be made in the south polar region by a five-nation expedition.

Dr. Paul E. Victor, French-American natural scientist here to obtain equipment for the three-year exploration to determine the thickness of the ice cap, said that the ice mass affects global weather in the stratosphere and beyond.

"More knowledge of this influence means better weather knowledge and forecasting," said Dr. Victor.

France, Australia, Great Britain, New Zealand, and the United States will pool their findings after completing their explorations. The coordinated measurements will be made during the international geophysical year, January, 1957, to August, 1958.

French Work in High Wind

LONDON, Jan. 11 (UP)—The French Antarctic expedition sent a message by radio to Paris today that it put ashore 250 tons of equipment at its site on the Aedlie coast in the teeth of a raging wind. The French unit of fourteen men arrived in Antarctica on Jan. 1 aboard the chartered Norwegian vessel Norsel.

The French party said in its message that it had re-established a base left by other French explorers three years ago. The barracks was in good condition and contained a wilted bouquet of flowers, a welcome note and food that still was edible.

British Reject Chile Protest

LONDON, March 22 (Reuters)—Britain rejected today a protest by Chile over two British bases in the Antarctic that are claimed by the South American nation.

A Foreign Office spokesman said "we reject the Chilean claim to the territory in question, which forms part of the Falkland Island Dependencies and is under United Kingdom sovereignty."

The Chilean Foreign Ministry had said that the bases in question were "both inside the limits of Chilean Antarctic territory."

Australians Explore Antarctic Mountains

By Reuters

Canberra

External Affairs Minister Richard Casey said that Australians in the Antarctic have climbed several previously unexplored mountains — including the Casey Range.

The men, due to be relieved soon, are setting up advance bases for a team which is to prepare the way for Australia's expedition in connection with the International Geophysical Year 1957-58.

The Casey Range was named by Sir Douglas Mawson during a British-Australia-New Zealand expedition in 1929-31. The present team's base, on the edge of the continent, is named Mawson.

Mr. Casey said the explorers' leader, John Bechervaise, had reported by radio the conquering of the Casey group and of two others—the David and Masson Ranges, about 20 miles south of Mawson.

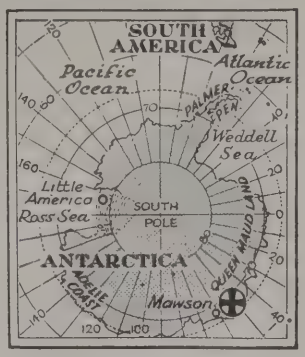
A Range Named for Charles

CANBERRA, Australia, Jan. 23 (Reuters)—Richard G. Casey, Australian Minister for External Affairs, said today that Queen Elizabeth had consented to the name Prince Charles Mountains for a range in Australian Antarctic territory. The mountains are 150 miles southeast of the permanent Australian base at Mawson on the polar continent.

Australian Ship at Polar Base

MELBOURNE, Australia, Feb. 13 (Reuters)—The Australian Antarctic expedition's ship Kista Dan has blasted her way free from ice that held her fast for three days in the Davis Sea, according to a radio message today from the expedition's leader, Philip Law.

Australians Discover New Antarctic Range



MELBOURNE, Australia, May 3—Aircraft attached to the Australian Antarctic expedition have discovered a new mountain range in the Antarctic sector claimed by Australia, it was announced today. The discovery was made during recent survey flights.

The mountains begin 150 miles west of Mawson, the expedition's main base, and stretch for 200 miles to the southwest with isolated peaks branching off to the north and south. The range is thirty miles wide and has an average height of 11,000 feet. Two of the peaks were estimated to rise more than 13,000 feet.

The new range rivals in size the Prince Charles Mountains that were discovered in 1954, 150 miles southeast of Mawson.

CANBERRA, Australia, Feb. 18 (Reuters) — The 1,239-ton polar ship Kista Dan, carrying a relief party of scientists and technicians, arrived yesterday at the Australian Antarctic base of Mawson.

A radio message received today said the base was in excellent condition. The ship anchored in the teeth of a bitter wind and the crew began unloading stores immediately.

Cosmic Ray Report Delayed

CANBERRA, Australia, Feb. 29 (Reuters)—The Australian Antarctic expedition at Mawson recorded a sudden increase of more than 50 per cent intensity in cosmic radiation last Friday. But it was unable to report it until today because a magnetic storm accompanying the increased radiation cut off radio communication.

British Make Aerial Survey

LONDON, Feb. 15—The British Antarctic Expedition has completed the first 1,000 square miles of an aerial photography survey of Palmer Peninsula—called by the British Graham Land.

The survey is being made by Hunting Aerosurveys, Ltd., a private group on contract for the British Government. Peter Mott is leader of the forty-six-man party. Two flying boats are making the aerial photographs and two helicopters are used to land ground surveyors. The expedition is based on the 900-ton ship Oluf Sven.

Ground positions are fixed by teams left overnight on the Mountain ridges by the helicopters.

The one "casualty" report is a photograper, Bill Freeman, who was severely bitten on the mouth when a colony of penquins attacked him as he picked up an egg.

SOVIET, AUSTRALIA IN POLAR CONTACT

MOSCOW, Thursday, Feb. 2—The Soviet and Australian Antarctic expeditions were reported today to have established direct contact and to have begun exchanging meteorological information. The contact was made on the initiative of Mikhail M. Somov, head of the Soviet expedition.

Australia severed diplomatic relations with the Soviet in the spring of 1954. However, Moscow recently has let it be known that it would favor a resumption of relations.

The special Tass correspondent with the Soviet expedition reported today that Mr. Somov had cabled the Australian scientific station at Mawson, to the west of the Soviet base, Mirny, proposing an exchange of weather data. The correspondent said both expeditions had agreed last week to cooperate regularly in charting the severe weather of the Antarctic.

Japan to Join 11 Other Nations With Expedition to Antarctic

By Reuters

Tokyo

Almost half a century since a Japanese Navy lieutenant went to the South Pole region in a 400-ton wooden vessel, Japanese natural scientists now are planning Japan's "comeback" to the Antarctic.

Lt. Nobu Shirase, the first man to plant a Japanese flag in the Antarctic in 1912, had only limited funds, no official backing, and is reported to have been either ignored or considered mad when he set out in 1910.

Some 45 years later, Japan will join 11 other countries in carrying out natural scientific observations in the Antarctic during the International Geophysical Year 1957-58.

Japan will spend about $3,000,000 on the venture.

Japanese natural scientists expect much of Antarctica in the future. If scientific development continues, the icy continent may one day be opened up for settlement.

Japan, with a population of 89,000,000 persons packed into an area of only 140,000 square miles, is always looking out for new areas where its surplus population might be welcomed.

The Japanese expedition will establish its base on Prince Harald coast, situated between Princess Ragnhild coast and Prince Olav coast. The Japanese base will be 500 miles from the Australian expedition's base on Mac-Robertson coast and 625 miles from Norway's base on Princess Martha.

The coastal base will also be 850 miles from the South Pole.

The Japanese will not go all the way to the South Pole. According to information available here, only the United States and the Soviet Union will send some teams there.

The coastal base will be about 10,000 miles from Japan.

An advance team of between 20 and 30 men is scheduled to leave Japan for the Antarctic in November, 1956. The main body will leave one year later.

An official of the Antarctic expedition headquarters in Tokyo, secretary-general Sakuichiro Hanzawa, was aboard the Japanese whaling ship Kinjo Maru early in December in an effort to get up-to-date information.

At the same time, the captain and engineer who will command the 3,000-ton Japanese Antarctic ship, Soya, left Japan in another vessel to make a preliminary survey.

The Soya, built in 1938, can make only nine knots. She will, however, have been completely remodeled by September, 1956, and then will be capable of a speed of 17 knots and able to make her way through thick ice packs.

The ship carrying the Japanese expedition to the Antarctic also will conduct extensive research on marine life and sea currents on the way to the polar region.

POLAR CREW IN TRAINING

81 Japanese Getting Into Trim for Antarctic Expedition

KUSHIRO, Hokkaido, Japan (Reuters)—The crew of eighty-one from the 2,208-ton vessel Soya, which will carry the Japanese expedition to the Antarctic, will be sent to the northernmost part of Hokkaido to get used to working in the cold.

Coast guard officials said the crew will be trained to use snow-tractors, sleighs, and other cold climate equipment.

Soviet Party in Antarctica; Hunts for a Davis Sea Base

By The United Press.

LONDON, Jan. 6 — The advance party of a Soviet expedition landed on the Antarctic Continent today and immediately began explorations, the Moscow radio reported.

It said the party was commanded by I. I. Cherevichny, veteran Arctic flier. The party went through Davis Sea in the Indian Ocean sector into Farr Bay aboard the ship Ob.

The Soviet Antarctic group immediately began assembling aircraft for exploratory flights, and a party of scientists set out on skis to scout the region for eighteen miles around, the Moscow broadcast said.

The Moscow radio indicated the Soviet expedition would explore on the Indian and Atlantic Ocean sectors of Antarctica.

"The final location of the Antarctic station will be determined only after detailed study by Soviet scientists and airmen of the section of the coast," the broadcast said.

[The general area set for the Soviet Union in last July's Paris international conference on Antarctic plans covers the Queen Mary Coast and Shackleton Shelf Ice, Long. 90 E. to 102 E. Davis Sea is at about Lat. 66 S, Long. 92 E; Farr Bay at Lat. 66:30 S, Long. 94:15 E.]

The Ob sailed from a Baltic port of the Soviet Union last Nov. 30 under the sponsorship of the Soviet Academy of Sciences.

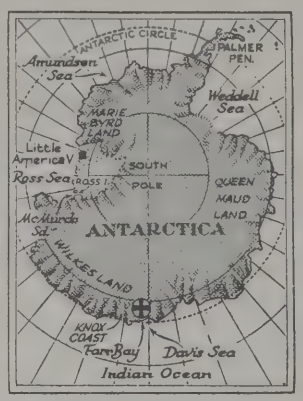
Soviet to Map Resources

MOSCOW, Jan. 10—Soviet scientists hope to make a comprehensive inventory of the resources of Antarctica.

This was disclosed here today by D. I. Shcherbakov, chairman of the Antarctic Research Council of the Soviet Academy of Sciences. His remarks were published in Literaturnaya Gazeta.

At the same time, Pravda reported that the Soviet Antarctic expedition had begun reconnaissance flight over the ice shelf of Knox Land to seelct a site for the principal Soviet shore base during the International Geophysical year, 1957-58.

A temporary landing strip has been cleared near the Knox land shore, Pravada's special correspondent with the expedition said and regular helicopter flights began Sunday. A caterpillar tractor, food, fuel and sleds already have been debarked from the Diesel-electric ship Ob. An Antarctic storm halted the helicopters flights until this week.



The Soviet expedition to the Antarctic Continent has reached Farr Bay (cross).

Mr. Shcherbakov said Antarctic research would occupy an "important place" in the academy's program for the coming years. He said the aim was to prepare an accurate geological map of the Antarctic continent, showing the distribution of mineras and the character of the ice cover.

Soviet scientists will devote particular attention to what Mr. Shcherbakov called the African quadrant of Antarctica. He said aerial photography and seismic methods would be used to determine the thickness of the ice cover and the depth of the bed rock under the ice mass.

The Russians are interested in studying the formation and movement of glaciers, he added. Magnetism, especially as it affects aviation and navigation, will also get attention, he said.

Oceanographic research will include the study of currents and the seasonal movement of plankton, principa source of food for fish. Mr. Shcherbakov said Soviet investigators would try to penetrate the upper atmosphere to determine the influence of Antarctic air currents on the world climate.

Soviet Antarctic Site Chosen

MOSCOW, Jan. 18—The Soviet expedition has selected a site for the Soviet Union's first permanent base on the Antarctic continent. The base, to be known as Mirny, lies west of Farr Bay and behind the Helen Glacier in the area of Haswell Island.

The Soviet press reported today that tractors, sleds, food, radio equipment and prefabricated housing units already have been debarked from the diesel electric ship, Ob, near the base site. The site was chosen after intensive aerial reconnaissance by Ivan I. Cherevichny and other Soviet aviators attached to the expedition.

The Soviet camp will have twenty-four dwellings, a radio station and a street 170 meters (558 feet) long, Trud, the Soviet trade union organ, reported.

It added that the work of setting up the base was proceeding day and night in favorable weather.

Second Soviet Ship Arrives

LONDON, Jan. 20 (AP)—The Moscow radio reported tonight the Soviet Antarctic Expedition's second ship, the Lena, reached Antarctic shores today.

The headquarters ship, Ob, reached Farr Bay, on the Indian Ocean sector of Antarctica, early this month. The Moscow radio said the Lena party was joining in work on the Soviet base in the area.

Soviet Party Having Trouble

LONDON, Jan. 31 (AP)—The Soviet Union's Antarctic explorers have run into trouble, the Moscow radio reported today.

The base ship Ob, first of two Soviet vessels to reach the area, ran into "a great many difficulties" while unloading because ice near the shore kept breaking up, the broadcast said.

The Russians tried to find another landing spot for the Ob's sister ship, the Lena, but she ran into a six-mile ice barrier covered with five feet of snow.

The radio said the Lena was "making frequent stops" during her battle through the ice and was unloading heavy equipment as she proceeded. Men from the ships already were ashore building their main base.

The Russians plan to set up three bases in the Antarctic for making observations during the coming geophysical year.

ANTARCTIC SHIFT BY SOVIET A HELP

Move Puts Russians' Party Farther From U. S. Base—Wider Benefits Seen

By WALTER SULLIVAN

BERLIN, Jan. 8—The Soviet Union's Antarctic expedition that landed on the South Polar continent Friday has occupied a site allocated to Belgium for the International Geophysical Year 1957-58. The Soviet landing was made at Farr Bay, west of the Shackleton Shelf Ice.

An official source in Brussels said today that Belgium notified the Soviet Union two months ago that she would be unable to send an expedition to the Antarctic. A similar notice was sent to the other countries concerned in the Antarctic scientific program.

The Soviet landing has been made about 270 miles west of the point assigned to the Russians during the conference on the International Geophysical Year in Paris last July. At that time it was informally agreed that they would set up their coastal base at about 104 degrees east longitude.

Their decision to shift westward will increase from 170 miles to 440 miles their distance from the projected United States base at Vincennes Bay. The latter is a deep indentation discovered by United States fliers in 1947 at Long .110 degrees E.

The wider separation of bases is considered an advantage by planners of the Geophysical Year, who wish to have the observatories widely scattered. During the Geophysical Year, which runs from 1957 to 1958, a multitude of phenomena is to be observed.

At the Paris conference the Russians asked to be assigned a station in the Indian Ocean sector since it lies in the same longitude as the heart of the Soviet Union. This is an important factor in certain geophysical observations.

Their use of this criterion was significant since it was a scientific one. It had been expected that they would ask for one of the places reportedly sighted by the Russian naval vessels which, under Bellingshausen, circled Antarctica in 1820-1821.

The voyage of Bellingshausen has until now been the only Russian exploratory venture into Antarctica. It was the basis for Moscow's claim that the Soviet Union should play a role in any Antarctic territorial settlement.

The expeditions supporting the International Geophysical Year are intended to be purely scientific, but political motives underlie most if not all of them.

The selection of Farr Bay as the Soviet base brings the Russians to one of the more accessible parts of the coast. No ship has ever managed to break through the girdling belt of pack ice to their original destination.

Farr Bay has been visited many times. The coast of that region was photo-mapped by seaplanes of the United States naval expedition in 1947.

The report from Moscow said the final site of the Soviet base had not been selected, but that it would lie somewhere between Mount Gauss and Farr Bay. The former, discovered by Germans early in the century, lies 125 miles farther west.

Sperm Whale Has Big Head

The head of the sperm whale, largest of the toothed whales, is about one-third the whale's total weight.

POLAR OASIS EXPLORED

Russians Set Foot on a Warm Area in Antarctica

MOSCOW, Feb. 8—Soviet scientists were said today to have elaborated a new theory for the origin of the Antarctic oasis discovered in 1948 by an expedition led by Rear Admiral Richrd E. Byrd.

Members of the Soviet expedition now in Antarctica have recently completed a reconnaissance of the 310-square-mile area of lakes, bare rocks and free-flowing streams back of the Queen Mary Coast. The area is on approximately Long. 100 E.

The Soviet scientists were reported to reject the theory advanced by American scientists that the warmth of the oasis was caused by volcanic action or underground combustion of coal.

The Russians have advanced the hypothesis that the oasis arose thousands of years ago following a recession of the continental ice cap. The Soviet explorers were said to believe that strong solar radiation and the resultant heating of the surface rocks caused the snows to melt quickly in the spring, forming rivulets and torrents.

These streams feed freshwater lakes that dot the rockstrewn landscape. By midsummer, not a trace of snow remains, according to the version of the scientists' findings published today in the Soviet Press.

The oasis has a climate differing radically from the rest of Antarctica. Warm winds circulate over it. The soil at midday reaches a temperature of 26 degrees centigrade (77 Fahrenheit) and the snow temperature stands at about zero centigrade, correspondents with the Soviet expedition reported.

The Queen Mary Coast area is about 230 miles east of the Soviet expedition's newly established shore base of Mirny, in the Farr Bay region.

The oasis was explored by a special expedition group led by Evgeny Korotkevich. The Russians first reconnoitered the area with two transport planes and helicopter and later made a ground survey.

The Soviet explorers reported the only life observed were birds, including the stormy petrel and gulls, and a vegetation limited to black, gray and white lichen on the stones and moss in the stream beds. They offered interesting facility for studying the geology and history of the Antarctic Continent.

Gales Damage Soviet Base

MOSCOW, April 1 (Reuters) —Hurricanes have caused damage to the Soviet Antarctic base of Mirny, on the Knox Coast, ripping off radio aerials with blasts of over 80 miles an hour, Tass, the Soviet news agency reported tonight.

INNER ANTARCTIC GETS SOVIET BASE

First Interior Post of Current Exploration Is Set Up 230 Miles From the Coast

By THEODORE SHABAD

A Soviet tractor party h driven 230 miles into the An arctic interior and set up th first permanent inland statio of the current international ex ploration program.

The new post, called Pioner-skaya, was opened May 27 by the six-man staff that will spend the winter there. The Antarctic cold season corresponds to the warm season of the Northern Hemisphere.

The Pionerskaya base is situated at Lat. 69 degrees 44 minuates S., Long. 95 degrees 30 minutes E. This is 230 miles southeast of Mirny, Soviet expedition headquarters, which was established last Jan. 13.

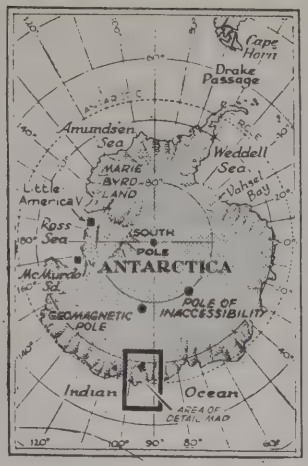
The report of the advance into the interior, made on the eve of the months-long Antarctic winter night, was radioed from Mirny by a correspondent of the Tass news agency and was printed in the Soviet press.

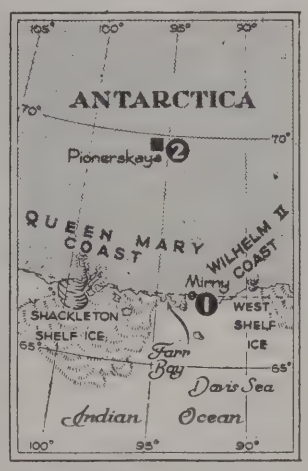
American correspondents covered the recent summer phase of the United States Navy's Antarctic expedition. But no reporters remained with the wintering parties at Little America and McMurdo Sound when the Navy's supply ships returned to the United States in April.

The Soviet Union, by contrast, has continued to give wide publicity to its Antarctic activities since the summer.

Newspapers have printed regular contributions by expedition members. In addition to the Tass reporter, special correspondents of Pravda, the Communist party organ, and Izvestia, the Government paper, are attached to the wintering staff.

Soviet newspaper readers have become familiar with the Pravda Coast, which is the name given by the Russians to the stretch of Antarctic shoreline adjoining their Mirny base. Scientific findings of the expedition are described in glowing terms.





NEW SOVIET ADVANCE: A tractor party has driven from the main base at Mirny (1) to set up the first inland station at Pionerskaya (2).

The current exploration program of the United States, the Soviet Union and other nations is in preparation for the International Geophysical Year, 1957-1958. This is a coordinated scientific project for the study of the earth and its atmosphere.

The newly reported Soviet penetration of the icy continent began April 2 when eleven members of the expedition set out on tractor-drawn sleds from the Mirny base. The party was headed by Dr. Mikhail M. Somov, chief of the entire Soviet Antarctic expedition.

Pushing the daylight work season to its limit, the group carried on a month-long series of observations and surveys en route to the new station site. According to the Tass report, the scientists braved blizzards, temperatures of forty below zero and other rigors of a late Antarctic autumn.

On May 4, the tractors reached the site, situated on the interior plateau at an elevation of 9,000 feet. The station was named Pionerskaya in honor of the Pioneers, Soviet Communist children's organization, and to commemorate the expedition's own pathbreaking effort.

Two other scientific stations are yet to be established by the Russians. They are Vostok (East), at the Geomagnetic Pole, and Sovetskaya (Soviet), at the so-called Pole of Relative Inaccessibility.

Aircraft from the Mirny base on the coast flew in materials and supplies for the construction of the Pionerskaya station. While construction was still proceeding, five members of the original tractor party, including Dr. Somov, returned by air to the main base.

The work was completed by the six others on May 27.

The wintering staff consists of Professor Gusev, station chief; Andrei Kapitsa, glaciologist? Vitaly Barbarkin, aerologist; Vitaly Barbarykin, aerologoperator; Nikolai Kudryashev, tractor driver, and Pyotr Firsov, carpenter.

Blizzards Halt Reds

By Reuters

Moscow

Fierce blizzards and deep drifts are delaying the Soviet Antarctic Expedition on its drive over the South Pole ice cap, the Soviet news agency, Tass, reports.

A "perfectly heard" radio-telephone report from the expedition said tractors hauling sleigh caravans were bogging down in drifts.

The direct 9,000-mile radio-telephone link between the expedition and Moscow will go into "normal service" shortly, Tass said.

Operating out of a base at Mirny, on the Knox Coast, the Soviet group is measuring the depth of the ice, among other observations.

The expedition reports the ice is 1,997 feet thick at an altitude of 655 feet above sea level at a point within 2½ miles of the coast. The ice here rests on the ocean floor.

At 12½ miles from the coast, at an altitude of 2,755 feet, the ice is 2,296 feet thick, and rests on the continent itself.

SOVIET POLAR SURVEY

1,625-Mile Antarctica Flight Seeks New Route Bases

MOSCOW, March 6 (Reuters) —A Soviet plane has made a 1,625-mile flight into Antarctica to explore possibilities for new bases on the route to the South Pole.

The Soviet News agency Tass reported that the plane had hit the Soviet Antarctic expedition base at Mirny and penetrated to 76 degrees latitude south during its 10-hour flight.

The flight established that it was possible to set up bases in the heart of the continent, Tass said.

Radar Line Conquers Arctic Wastes

3,000-Mile Warning Net Rising Fast Despite Perils

By HANSON W. BALDWIN

A 3,000-mile, $400,000,000 electronic fence is rising rapidly in the frozen wilderness of the North.

Some 1,400 miles north of the United States-Canadian border, stretching from Alaska to inhospitable Baffin Island, this modern wonder of the world is being built to help protect the North American continent against enemy air attack. The radar project is known in contractors' jargon as "Project 572" but is more popularly called the D. E. W. or Distant Early Warning line.

Its economic effects on the North have been likened to those of the Yukon gold rush. The line itself has been compared, with both laudatory and critical intent, to the Great Wall of China.

A party of thirty-one United States and Canadian newspaper men was given the first public preview of the line in an extensive ten-day air trip

Their material, reviewed for security by the United States and Royal Canadian Air Forces, was released for publication

The correspondents flew in a Douglas C-124 Globemaster of the Eighteenth United States Air Force over large sections of the line from east to west. They visited the three principal types of radar sites under construction or completed in Baffin Island, the Gulf of Boothia area, Victoria Island and northern Alaska.

The trip demonstrated that the immense difficulties of supply and construction in a winter wilderness, hundreds of miles beyond railheads and along the shores of frozen seas, were being overcome. Fifty-below-zero temperatures, one-hundred-knot winds and fire have sometimes slowed but have never halted construction. Dozens of stations are rising north and south of the seventieth parallel of latitude. Some are in places accessible only to aircraft and possibly never before trodden by men.

The line is far from finished but it is generally on schedule. Some stations should be completed this year and the entire project in about two years, the Air Force states. The D. E. W. line is a military project but it is being built under contract by about 5,200 civilians.

They work a fifty-nine-hour seven-day week and draw good wages. Thousands of other civilians in New York, Montreal and numerous other cities back them up. The project is supported and supplied by hundreds of commercial cargo aircraft of Canada and the United States and by thousands of United States and Canadian service men.

New engineering and supply techniques, including the use of ice landing strips and huge machines that roll and waddle across the rugged country, have been developed.

The cost is being borne entirely by United States' taxpayers. The brawn is chiefly the contribution of Canadian laborers. In both respects the D. E. W. line is undoubtedly the Arctic's biggest, most difficult and most challenging project. The North has been invaded in some of its most remote fastnesses.

The D. E. W. line is a project born of the world's insecurity. It was first proposed by a study group of United States scientists in 1952 as a means of providing four to six hours warning of the approach of enemy aircraft and of plugging the Arctic gap on the transpolar air approaches to the North American continent.

It was to supplement spot radar defenses in both countries. It was to be an addition to two other lines. One is the Pine Tree radar chain, which stretches across the continent roughly along the United States-Canadian border. The other is the Mid-Canada radar line now under construction. It will cross Canada at about the fifty-fifth parallel.

These two lines were to tie in with radar stations already established in Alaska and along the land routes to it and with stations in Newfoundland, Labrador and Greenland.

In addition, the whole vast warning system is being extended by radar picket ships of the Navy and radar picket planes of the United States Air Force and Navy.

This concept of a gigantic electronic defense for the continent started to take shape with the erection of experimental stations near Barter Island in Alaska.

The Western Electric Company, prime contractors for the entire D. E. W. line, built and tested in the winter of 1953-54 prototypes of stations. These tests were successful.

So, late in 1954, after agreement between the United States and Canada, Western Electric was given the go-ahead signal for the entire project.

An intensive airlift to the frozen wastelands initiated the actual construction phase about fourteen months ago. Last summer the Navy lifted hundreds of thousands of tons of supplies to distribution and base sites in the largest maritime operation that ever braved the ice pack of the American Arctic.

Today, scores of radar sites well above the Arctic Circle are well along in construction. The stations are located on islands and the mainland. They stretch from the rugged mountains of Baffin Island across the Canadian Arctic to the frozen flat tundra of Northern Alaska. The line is divided, for construction purposes, into three sections—Eastern Canada, Western Canada and Alaska.

Buildings and facilities have been standardized. The main stations will be equipped with rotating radar. They will have air strips, warehouses and the capability of supplying logistic support to ancillary stations.

Auxiliary stations will have the same electronic capabilities as the main stations but lack the logistic facilities. Intermediate or gap-filler radar stations are the smallest of the three categories. They will be equipped with nonrotating radar to provide an electronic fence or alarm system between main and auxiliary stations. These last stations are roughly similar to many of those now being constructed alon gthe mid-Canada line.

None of the stations will be self-operating. But they have many novel electronic features. Although figures are classified, it is clear from released data that their permanent operating complements will be small.

The constant attention of human observers will not be required. Whenever a blip of light, indicating an approaching plane, is picked up on the radar screen, an alarm will sound. Observers will then man the radar scope.

Another novel and fundamental factor is a new form of communications. It and the radar itself are said to be almost immune to interruptions caused by the magnetic storms common to the Arctic.

The method is known as the "scatter" system. It uses a parabolic antenna and "shoots" an immense intense beam of shortwave radio emanations into space. The electrons and ions in the ionosphere and troposphere

Solid, dotted and broken lines show the locations of the D. E. W., Mid-Canada and Pine Tree radar systems.

Adm. Richard H. Cruzen

To Federal Electric

Vice-Admiral Richard H. Cruzen, U. S. N., ret., has become associated with Federal Electric Corp., a subsidiary of International Telephone & Telegraph Corp., as project manager of the DEW (Distant Early Warning) Line. Adm. Cruzen will be responsible for carrying out the recently announced contract with Federal for the maintenance and operation of the Arctic Circle radar warning system.

reflect these waves. The ionosphere begins about twenty-five miles above the earth. The troposphere is all the atmosphere below the stratosphere. The waves, in bouncing off the ionized layers of the upper atmosphere, are reflected, like beams of a searchlight, back to earth at long distances from the transmission point.

Conventional long and short wave communications will also be employed.

These systems link the D. E. W. line with the Mid-Canada line, the Pine Tree chain, the air defense systems of Canada and the United States, the United States, Alaskan and Northeast Air Commands, the United States Strategic Air Command and other command centers.

But just how this is done is veiled in military secrecy. The precise locations of D. E. W. line sites, their numbers and their military capabilities were forbidden topics on the tour. So, too, were the exact progress of construction, the numbers of operating personnel required to man the line and much other data.

But it is no secret that the D. E. W. line will be operated largely by civilian personnel. The Federal Electric Corporation, a subsidiary of the International Telephone and Telegraph Company, has signed a three-year contract for the manning and operation of the line.

A United States - Canadian team of officers will be at each of the main stations, the Canadian House of Commons was told recently. These officers will have full military and tactical responsibility. Total operating personnel for the entire line may be about 1,200, unofficial estimates have indicated.

The first of the stations will be manned this summer and the entire line may be operational next year, a Canadian official has declared.

The contractors may recruit husband-and-wife teams for duty, as operating personnel at some of the stations. In any case, some of the quarters under construction include facilities for women.

The civilians will man, operate and maintain the radar sites. Most of them are expected to be Canadian, partly because they are more accustomed to the frozen Arctic and partly because of the feelings of some Canadians on the issue of sovereignty.

The sovereignty issue is a particularly sensitive one this year in Canada because of large commercial and oil developments financed by United States capital.

One or two of the Canadian correspondents on the press tour exploited the issue. But as far as this correspondent could determine the issue of Canadian sovereignty is a tempest in a teapot, raised chiefly for political effect.

The United States Government and the United States Air Force have shown great deference for the feelings of Canadians. In addition, the agreement between the two governments provides for the retention of all sovereign rights by Canada.

In fact, the Canadian Government can take over operation of the entire line, except for the Alaskan section, if it wishes to. The impression this correspondent gained from the trip was that Canadians and Americans were working in harmony on a project about which both countries could be proud.

The D. E. W. line positions are isolated. They are exposed to the awful fury of Arctic winters. But man, in what Maj. Gen. James E. Briggs of the Air Force has described as the largest assault ever made on the Arctic, has established scores of beachheads and is there to stay.

Canada Builds an Arctic Venice To Replace Town Sinking in Silt

New Aklavik Rises on Stilts —Some Predict Eskimos Won't Move Into It

By TANIA LONG

AKLAVIK, Northwest Territories, March 31—An Arctic Venice, built on cement piles sunk into the permanently frozen soil of the Mackenzie delta, is in the making thirty-five miles northwest of this far north community.

It is the new Aklavik being built to replace the present town, which, as the population increases, is slowly sinking into a marsh of silt and melting ice.

The construction of what is to be Canada's first modern Arctic town has challenged all orthodox building theories. Because of the peculiar nature of the ground 100 miles north of the Arctic Circle, where the frost stretches down a thousand feet, an altogether novel engineering approach had to be employed.

In technique, it most resembles that used in the building of Venice, with its houses supported by heavy wooden piles sunk into the lagoons of the North Adriatic. Only here, the piles are cement. They are sunk into deep holes of permafrost soil, melted out with a steam jet and then allowed to refreeze. And instead of having the Adriatic at its front door, Aklavik overlooks the gray-brown waters of the mighty Mackenzie River, which, despite the airplane, remains the main supply route through Canada's vast northland.

Site of new town (cross)

The present Aklavik, sheltering about 900 white settlers, Eskimos and Indians, rests on a mixture of frozen silt and ice. There is more ice than silt, and so Aklavik can be said to be a town resting on the water. As the ice in the soil melts in summer, the streets and backyards turn into seas of thick mud.

The local citizenry jokingly call this northern metropolis the "mud tropolis." To Government officials, awake to the growing importance of the town as an administrative, educational and commercial center, the conditions that keep Aklavik uncomfortable and primitive are no joke. It was obvious that if Aklavik were to live up to the role that appears to be assigned to it, it would have to be moved. The present site presents a health hazard. There is no possibility of installing modern water and sewage systems.

The town is on the supply route for the Dew (distant early warning) line and there is a constant stream of transient traffic, yet hotel accommodations hearken back to the Dark Ages. The present town simply cannot keep up with the rapid expansion of the Northwest Territories. In an air age it cannot have an airstrip and for three months every year, during the breakup and freeze-up periods, planes are unable to land on the frozen river, and the entire community is cut off from the rest of the world.

The new site was chosen two years ago after an extensive survey. Some buildings are already up. These will house the construction workers, some of whom are due in this coming week. Two rows of gray cement piles, sunk last summer, are ready to receive their load of cement flooring for the first administrative building to go up.

Soon more piles will be sunk as foundations for schools, churches and homes. The buildings will stand on stilts. These will serve to protect the soil from the heat of the house, thus preventing undermining of the foundation.

Another type of construction will be employed for the small houses. They will be erected on a "pad" of two feet of gravel to allow enough air circulation to dissipate heat from the buildings.

The most troublesome problem was how to erect an efficient sewage and water system. Pipes buried in the ground would freeze even in summer unless they were carefully insulated, so the engineers decided to carry the pipes above ground.

They are to be contained in insulated boxlike enclosures run on stilts along the streets. Along with the water and sewage mains the "utilidors," as these contrivances are known, will carry a warm water pipe that will supply both hot water and steam heat from a central community heating plant.

Roads and "utilidors" are bound to cross, and when they do the roads will take to the air and go over the "utilidor."

After many experiments, Canadian engineers decided they could build all-year roads by laying gravel on top of the moss, sometimes adding the brush obtained from clearing the land as an additional mattress under the gravel.

The new site is not expected to be completed before 1960. By then it will be able to accommodate 2,500 persons.

About one-third of the construction work is being carried out by Eskimos and Indians newly learned in carpentry and masonry.

The moot question—the one on everyone's lips—is whether the majority of the inhabitants of the present Aklavik will make the move to the new town. Most old-timers say they won't. Many Eskimos and Indians point out they would be seventy miles, by land and water, from their trapping lines. Perhaps, for a while there will be two Aklaviks, the old and the new. In the opinion of the Government, however, the new one is bound to win out in the end.

Weather Data Exchanged

FAIRBANKS, Alaska, March 1 (AP)—The Daily News-Miner said today that weather information had been exchanged between the Soviet Union and Alaska for several years and balloons from each had been sent over the other's territory.

The newspaper, which is the farthest north daily on the continent, said it was common knowledge in Alaska that balloons from Siberian weather stations had been found in Alaska.

Siberian weather stations broadcast weather reports on an international frequency and these reports are of great value in assisting Alaska forecasters to prepare weather predictions.

Arctic Seen Key Area In Any Global Conflict

By Col. Bernt Balchen

THULE, Greenland.

Until recently two large areas of the globe were considered by nearly all strategists to be the wrong place for any large military operations. Supply problems were supposed to be too difficult to tackle. These are the Arctic and Antarctic regions.

I personally can testify that as far as the Arctic is concerned, this is a thing of the past. The Arctic region today is located in the center of the biggest industrial and strategic air target areas of our globe. Three of our most densely inhabited continents—North America, Europe and Asia—meet at the ice-covered beaches of the Arctic Ocean; the extreme northern parts of these continents are the Arctic land areas.

In any global conflict of the future it is reasonable to assume that the Arctic and sub-Arctic regions could be the areas from which the first decisive blow might be delivered by air. The low temperatures that are encountered on flights across the Arctic regions now are no more severe than those found in daily air operations at high altitudes in many areas on the globe.

On the whole, flying across the North Polar regions has no major unsolved problem. Accurate electronic aids to Polar navigation, excellent aircraft and engine efficiency and the present high proficiency level of United States Air Force and other flight crews make this type of operation practically routine.

But with the progress of aviation—military and civil—more ground installations in the Arctic land areas are needed for continuing efficiency and safety. A complete network of weather, radar stations and air bases is required. Their size may vary from a small weather post manned by ten to twelve men, to a large air base with large personnel complements stationed there all the year around and committed to large operations.

Such installations must be considered as becoming permanent and being a future part of the rest of the world-wide air network.

A large number of these Arctic stations will have to be set up in areas where they cannot be supplied by anything else but by air lift. Since all will be located in the most remote regions of our inhabited continents, their operations are

Col. Bernt Balchen

certain to bring with them many logistical, physical and psychological problems arising from climatic and geographical conditions.

The station personnel will come mostly from the Temperate Zone and will have to be well indoctrinated. The intensive research and development work in cold-weather operations, engineering and construction techniques being developed in Alaska and our cold weather hangars in the United States already have proven of incalculable value.

The problem of supplying any Arctic base is of paramount importance in the selection of site and establishment of the base, and will remain so during the existence of the installation. The transportation of heavy supplies to points of construction has up to now been largely dependent on shipping. The season of open water can vary from three weeks to four to five months. Clearly it is important to develop new ice-breaker types suitable for navigation a much greater portion of the year, and new over-snow tractor train techniques and capabilities.

But these do not and will not eliminate the requirement for air support. For purposes such as surveys and preparatory work, air lift is a tremendously important transportation medium.

Furthermore, modern Arctic installations must be assured of all-year-round accessibility and must therefore have an air facility available for support when other forms of transport are closed out on account of ice and snow obstacles and the non-existence of roads.

Hundreds of tons of supplies already are being moved in the Arctic by tractor trains over long distances. A highly important research and development program undertaken in northern Greenland on over-snow, overland transport techniques with new heavy vehicles, coupled with snow-compaction techniques for building air strips and even airports, promises great enchancement of our future Arctic logistic capabilities.

New Diet Adds More Eskimos

The Eskimo birthrate increases sometimes triples, when the Far North people eat "white man's food" instead of their old pure animal diet, a new Smithsonian Institution report says.

Prof. G. E. MacGinitie of the California Institute of Technology reported the blubber influence in a Smithsonian publication about his biological studies at Point Barrow.

"When hunting was the only means of subsistence, Eskimo women became pregnant only once in several years," he wrote. "But with the new diet they bear a baby about every year."

Dr. MacGinitie made his investigations at the Navy's Arctic Research Laboratory.

"What will happen when outside support is shut off is an important and serious problem," he wrote. "Some few fathers are training their boys in hunting and other Eskimo skills, but most of them are content to let the future take care of itself. The situation is fast becoming a problem difficult of solution."

Of primary importance in the old Eskimo culture is the bowhead whale. "Several," Prof. MacGinitie says, "are taken in the spring of each year and the flesh stored underground in cellars where it remains edible for three or four years. The whales feed on euphasiids, mysids, pteropods and copepods (tiny sea organisms), which are so abundant that the great blue whale can attain a weight of 60 tons in two years.

"Baleen whales probably lead the easiest life of any mammal. These enormous creatures have only to swim slowly through water, which has about the same specific gravity as themselves, opening and closing their mouths and swallowing food.

"To an Eskimo the most delectable food is whale muktuk, which consists of whale skin with about an inch of underlying blubber. After freezing, the muktuk is cut into small pieces and eaten raw. It has a nutty flavor and is really quite good.

"Perhaps next in importance in the native economy is the bearded seal. This marine animal, which reaches a weight of 500 to 600 pounds, feeds almost entirely on amphipods (tiny shrimplike animals), using its whiskers for sweeping them from the underside of the ice. The teeth are very small and are of little use for holding or masticating food.

"In winter these seals are hunted in offshore leads. They float when shot, so can be taken easily. In summer they are hunted in boats. Then they sink when shot and, if not immediately harpooned, are lost. On one summer hunt on which I accompanied my two boatmen, 11 seals were shot, 7 were lost."

SOVIET SAID TO LEAD U.S.

Geographer Says Canada Lags Also in Arctic Research

MONTREAL, April 2—North American geographers heard today that the Soviet Union was ahead of the United States and Canada in Arctic geographical research.

The opinion came from Dr. Louis O. Quam, president of the Association of American Geographers, which is holding its annual meeting here. Dr. Quam, who is head of the geographical branch of the United States Navy's research office in Washington, D. C., said, however, that the United States and Canada were rapidly catching up to the Soviet Union.

Dr. Quam said, "There is no question but that the Russians are ahead of us in Arctic geographical research. They have been putting great emphasis on it since 1930."

Report 1901 Polar Buoy

ALLESUND, Norway, Jan. 19 (AP).—A buoy believed to have been thrown overboard from the windjammer America in 1901 during the Baldwin-Ziegler North Polar Expedition recently washed ashore near here. A plaque attached to the cork float identified it as a relic of the United States expedition that had to turn back without reaching its goal.

The Pen Is Mightier Again

PROVINCETOWN, Mass., June 7 (AP)—Rear Admiral Donald Baxter MacMillan, 81 years old, said today he had canceled plans to leave this month on a thirty-first expedition to the Arctic. The noted explorer put the blame for the decision on his publishers. "They insist I finish my autobiography," he explained.

RADAR WILL STUDY AURORA BOREALIS

Chains of Stations in Alaska Will Seek New Scientific Data on the Phenomenon

FAIRBANKS, Alaska, March 31—Radar will be used in the 1957-58 International Geophysical Year for study of the aurora borealis.

Scientists and technicians of the University of Alaska's Geophysical Institute are to establish chains of radar stations for the project. There will be six stations in a 1,600 mile stretch from the Arctic Sea to the Aleutian Islands. There will be two between Nome on the Bering Sea and the southeast border of Alaska and Canada, a distance of about 800 miles.

Dr. C. T. Elvey, director of the institute and chairman of the aurora and air glow panel of the United States National Committee for the International Geophysical Year, has disclosed that the low frequency radar pulses also will analyze the aurora in Canada, the northern United States, Europe and the Soviet Union.

In the Northern Hemisphere the phenomenon is also known as the northern lights. The Southern Hemisphere has the aurora australis or southern lights. Similar study in the Southern Hemisphere is not planned, but two installations will carry on cooperative studies. Tiny Macquarie Island, south of Australia, and southern New Zealand are the radar sites.

A pilot radar project is in progress on the University of Alaska campus, five miles northwest of Fairbanks. The station is in the zone of greatest frequency of auroras, a belt about 23 degrees from the magnetic pole in each hemisphere.

Dr. Elvey, who was for many years on the staff of the University of Chicago's Yerkes Observatory, has delegated direction of the radar phase of auroral study in Alaska to a visiting British scientist, Gordon C. Little.

Radar, the electronic eye, can detect auroras through clouds or in daylight, Dr. Elvey stresses.

Auroras are caused by streams of charged particles that come to the earth from the sun. The earth's magnetic field captures the particles and funnels them to the north or south toward the geomagnetic poles. Radio and radar waves are scattered and reflected by these ribbons and rays, which at night show up as pastel greens, occasionally tinged with pink or purple.

The Alaska study will seek to determine how far the auroral bands go around the earth. Auroras do not reach the ground and end about 60 miles above the earth. Other objectives are to make simultaneous maps of the distribution of auroras over the globe, to correlate the auroral displays with activity in the sun and with magnetic storms and other phenomena and to examine the physical processes of the aurora.

Eskimo Scouts With Alaska National Guard Do Much More Than Attend Weekly Sessions

JUNEAU, Alaska (NEA)—Eskimo scouts with the Alaska National Guard do more than drill once a week and go to camp in the summer.

For example, not long ago, Sgts. Willis Walunga and Clifford Iknokinok—trappers and fishermen from Gambell, St. Lawrence—were alerted to organize a search party. Five U. S. airmen were lost in a snowstorm trying to get to a radar site up on a mountain.

A blizzard was raging more than 60 miles an hour and drifts were as much as 10 feet hight.

Along with four other guardsmen they searched up and down the bitterly cold, wind-swept mountainside for six hours. No luck. Exhausted, they rested for a short time in a chilly shack and then returned to the search.

After five more hours of this gruelling activity Walunga finally found the men half-frozen, huddled in the lee of some big rocks. With the help of the other scouts the men were carried to warmth and medical attention. They all recovered.

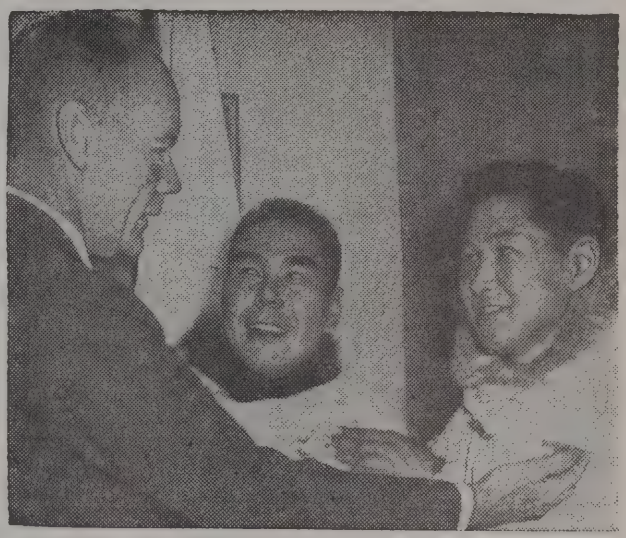
For this routine job they got a warm "thanks" from the men they saved.

But when they rescued 11 crew members of a Navy patrol plane shot down by Russian MIG's last summer their reward was greater. Walmung and Iknokinok found the downed plane and moved the wounded and burned fliers from the spot near the Russian border, where they crashed, to a hospital.

For this they were given a trip to the U. S. and awarded honorary Navy wings at the Pentagon.

But these are just some of the side jobs of the Alaska guard, composed of 1,800 men in six units. Their main role is to help the U. S. Army develop winter operational techniques and cold weather gear, and in emergencies aid the Army in protecting vital harbors, bridges and communications.

Even when running their trap lines, hunting, and fishing on the lonely Alaska coast and offshore islands facing Siberia they keep a constant eye on the Red border to report any unusual activity instantly.



HONORARY NAVY WINGS—They were pinned on Eskimo National Guardsmen Clifford Iknokinok, center, and Willis Walunga by James J. Smith Jr., assistant secretary of the navy for air, for their part in rescue of navy fliers shot down by Russian aircraft.

Alaska's North Shore Recedes 7 Feet a Year

WASHINGTON, Feb. 5—The northern edge of Alaska is receding at the rate of about seven feet a year.

Prof. G. E. MacGinitie of the California Institute of Technology discloses this fact in a report made public today by the Smithsonian Institution. He stated that the land at Point Barrow, Alaska, northernmost territory under the United States flag, had probably extended at least 500 feet father north seventy-five years ago. This assumption is born out by the disappearance of an Eskimo village.

Ocean currents and wind tides have eaten away at the low-lying land, the report says.

RARE AURORA GLIMPSED

Northern Lights With Red Arc Seen in Alaska

FAIRBANKS, Alaska, Feb. 25 (UP)—An aurora borealis of the type seen only four times in the last forty years stretched across the northern sky here early today, University of Alaska geophysicists reported.

Dr. C. T. Elvey said the northern lights that flashed at 12:15 A. M. (Alaska time) had contained a pure red arc. He said that Karl Stromer, Norwegian geophysicist, had received only four reports of the arc in forty years of research.

Dr. Sydney Chapman, chairman of the International Geophysical Year 1957-58, was visiting the campus here and saw the arc. He said the current sun spot disturbance probably had caused the rare light.

Dr. Elvey said the northern lights might have been observed as far south as Seattle and as far east as Calgary. He appealed for reports from the public on the sighting of the arc.

'OPERATION MOOSE HORN'

Supply Flow Tested for 10,000 Troops in Alaska

FAIRBANKS, Alaska (UP)—The Army tested its ability to supply troops via over-the-snow vehicles and by air drops in frigid Alaska in "Operation Moose Horn" in which 10,000 troops were involved.

Participating were 4,000 soldiers from Fort Richardson, 3,500 from Ladd and Eielsen Air Force Base, and 1,500 from Fort Lewis, Wash., who make the trek to Alaska up the Alaskan-Canadian highway. Gen. James F. Collings, commander of troops in Alaska, was chief of the maneuver.

Minerals Chief Yukon Output

Silver, lead and gold, in that order, are the chief minerals produced in the Yukon territory.

FAR NORTH LOSING FRONTIER ASPECT

Council in Ottawa Is Told How Radar Line Brings New Ways to Natives

By TANIA LONG

OTTAWA, Jan. 21—Canada's vast and once distant North is rapidly being integrated with the rest of the country. The United States radar defense installations being erected along the Arctic shores are largely responsible for this.

The changes taking place above the Sixtieth Parallel are so swift that a new approach is needed by the authorities who govern the 16,000 whites, Indians and Eskimos who make up the sparse population of the 1,000,000 square miles of the Northwest Territories.

This became clear this week from the deliberations of the Council of the Northwest Territories, which is holding its winter session in the capital.

The nine-man council, with a commissioner presiding, is probably Canada's most colorful public body. Its free and frank discussions, often leading to vigorous arguments, provide a kaleidoscopic image of conditions in the North.

On the council are the chief of the Royal Canadian Mounted Police, Commissioner L. H. Nicholson, a top level Montreal business man and three high-ranking civil servants. These are the appointed members.

The elected members, who represent northern constituencies, consist of a white fur trapper from Aklavik, one of the last of his kind, since trapping licenses are now granted only to Indians and Eskimos; a lawyer from Yellowknife and two general traders from small settlements in the territories.

With Commissioner of the Northwest Territories R. G. Robertson in the chair, the council meets twice a year, in the North during the summer and in Ottawa during the winter.

The council's debate, the first since work on the Distant Early-Warning radar line got under way, shed revealing light on developments up North.

Nomadic Life Near End

As Commissioner Robertson commented, the days of the Eskimos' nomadic way of life are drawing to a close. With radar bases and weather stations in increasing numbers throughout the North, the time will come when most of the Eskimos will have to learn to live the white man's way.

Eskimos already are being used to maintain some of the bases and trained to operate them.

Special Mace for Canada's Northwest

National Film Board of Canada

Vincent Massey, Canada's Governor General, with the mace

OTTAWA, Jan. 17 — The Northwest Territories Council, which administers the affairs of 16,000 Indians, Eskimos and whites in Canada's far north, was given an unusual mace today by Gov. Gen. Vincent Massey.

The mace, which will be the symbol of authority for "The Little Parliament of the North," was carved by the Arctic's finest Eskimo craftsmen of purely native materials.

It is made of free copper mined from the shores of the Arctic Ocean, whalebone and narwhal tusk form the Foxe Peninsula, musk ox horns from Ellesmere Island, pure gold from the mines of the Mackenzie District, an Eskimo harpoon, Indian porcupine quillwork from Yellowknife, and salvaged oak from H. M. S. Fury, which sank in 1825 while searching for the Northwest Passage.

The nine-man Northwest Territories Council meets twice a year, once in the north and the second time in Ottawa. It is presided over by the Commissioner of the Northwest Territories, R. G. Robertson.

The presentation took place before Prime Minister Louis St. Laurent in the ballroom of Government House.

Eskimo-Ranger Bands

OTTAWA — Selected Eskimos have been enrolled into the Canadian Rangers to become the last frontier fighters in North America's Indian scout tradition.

This enrolment has been going on without publicity for about five years. Today, from the hills and fjords of Baffin Island in the eastern Arctic to the Alaska frontier, there is a chain of guerrilla fighter groups.

Their number is a secret. Trappers or hunters mostly, they are the cream of the male Eskimo population.

Only on formal occasions do they wear a badge. It is the Canadian Rangers' insignia, green crossed rifles on a red patch, worn on the left arm of their Sunday-best parkas.

In their familiar habitat—the frozen Arctic vastness—they can be the deadliest humans in the far north.

No white man can operate in the rigorous Arctic conditions like these Eskimos. Using their husky-drawn komatiks (sledges) and a small bundle of equipment they can survive for months without outside help, moving remarkable distances across the wastes of ice and snow, sleeping in tents or igloos and showing phenomenal powers of endurance.

They are issued a rifle, bayonet and ammunition. Most are good shots.

Their role would be as scouts and guides, or to harass enemy units with hit-and-run methods.

WARM WEATHERMEN COST $15,000 YEAR

Resolute, N.W.T. May, 11 — (CP)—The five weather stations operated jointly by Canada and the U.S. in scattered areas near here illustrate the high costs of exploiting the deep arctic.

A department of transport official estimated that to construct the basic requirements of one station—four prefabricated huts each not much larger in floor area than an average three-bedroom house—cost from $250,000 to more than $325,000.

Furnishings, weather and radio equipment, tractors and snowplows, maintenance of landing strips, and storage sheds involve additional expense.

The main buildings where the men on the weather stations live and work are built of wallboard containing a three-inch-thick wool insulation plus aluminum insulation and triple-glazed windows.

It costs about $15,000 to supply one weather station with a year's supply of fuel oil. This is just the price of flying the drums of oil from Resolute to the weather station.

This spring, No. 435 Squadron from Edmonton's Nameo airport flew food, lumber, fuel oil and general equipment from Resolute Bay to the weather sites at an estimated cost of $360,000.

Arctic Radar Bill Signed by President

WASHINGTON, March 30 (AP) —President Eisenhower has signed into law a bill increasing the spending authorization for the "DEW line" continental warning system to $1,279,902,000.

The DEW (Distant Early Warning) line is a chain of radar stations being built by the United States across 3,000 miles of the Canadian Arctic.

The bill increases the spending authorization by $72 million.

Governor General of Canada and Party Tour Arctic

OTTAWA, March 20—Governor General Vincent Massey took off on his historic air trip to the high Arctic early this morning.

Traveling with the Governor General are his son, Lionel, who also is his secretary, and his daughter-in-law, Mrs. Lionel Massey. This will be the first visit to this country's Arctic domain by a representative of Queen Elizabeth, who also is Queen of Canada.

FROBISHER BAY, Baffin Island, March 21 (Canadian Press) — Gov.-Gen. Vincent Massey sampled life in the Arctic today, eating Eskimo food and riding a dog sled.

A blizzard almost prevented his plane from landing here last night. A dog team was placed at his disposal for his three-day stay in this outpost, approximately 1,200 miles north of Montreal.

RESOLUTE BAY, Canada, March 24 (AP)—Vincent Massey, Governor General of Canada, flew over the North Pole today.

Mr. Massey, who is making an aerial tour of Canada's arctic territories, left this morning on the 2,000-mile round-trip flight to the pole.

A message received here said the four-engined Royal Canadian Air Force plane had circled the pole in a dim Arctic haze. The trip was made a day ahead of schedule because of unusually good weather.

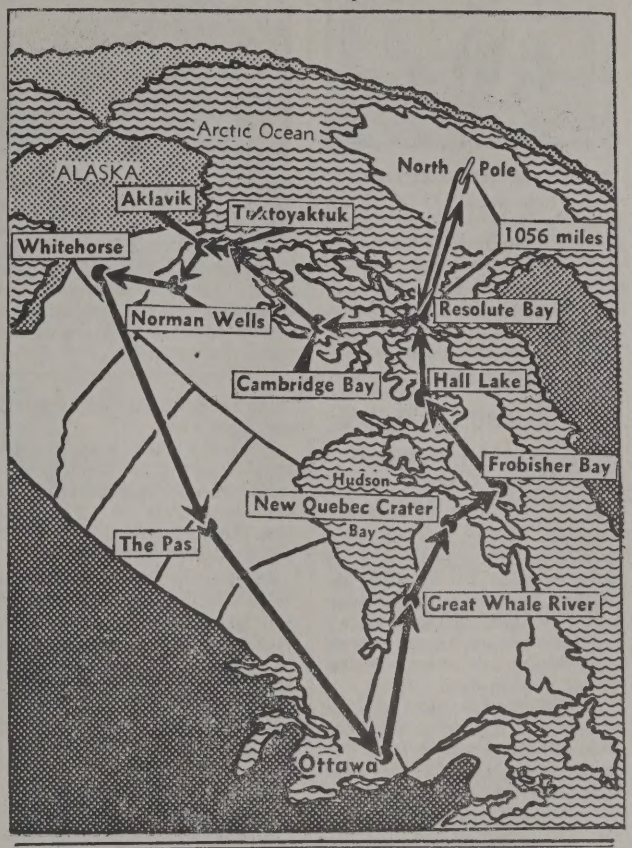
CAMBRIDGE BAY, NWT., March 28.—(CP)—An Eskimo epidemic of whooping cough which has resulted in three deaths is raging in the path of Governor General Massey's high-Arctic tour, it was learned here today.

Mr. Massey's visit to this frozen port 175 miles inside the Arctic Circle coincided with the work of a medical expedition of six doctors and six X-ray technicians who yesterday began a health survey that will extend along a front of nearly 1,000 miles.

Yesterday, temperatures dipped to 25 degrees below zero as the 69-year-old Governor General sat behind a windbreak on Cambridge Bay among Eskimo children and fished through the ice.

TUKTOYAKTUK, NWT, Mar. 29—(CP)—Governor General Massey today gets a close-up view of this Arctic land of reindeer when he visits the herd of Jimmie Komiak.

The Governor General arrived here yesterday after a 600-mile flight from Cambridge Bay, Victoria Island.



On his arrival at Tuktoyaktuk, which is often called Tuk-Tuk and means "resembling a caribou", Mr. Massey visited homes in the community, meeting and chatting with both Eskimos and white settlers.

AKLAVIK, Northwest Territories, March 30—This whole Arctic community crowded onto the frozen Mackenzie River today to give Governor General Vincent Massey of Canada typical northern welcome. He flew here to spend the Easter weekend with the 900 Eskimos, Indians and white settlers living in the continent's most northern town.

On this Good Friday the Governor General's program was relatively subdued. It included attendance at mass at the Roman Catholic mission, a visit to the Anglican residential school for Eskimo and Indian children, All Saints School, and a visit to the hospital.

NORMAN WELLS, Northwest Territory, April 2—Governor General Vincent Massey visited this far northern oil field today. The field supplies much of the gasoline and oil required on the Defense Early Warning line.

During a brief stop on a seventeen-day tour of Canada's Arctic areas Mr. Massey was shown over this thriving installation. It is contributing greatly to the development of the North, and to the construction of the continent's most northerly defense system, known by its initials, D. E. W.

THE PAS, Manitoba, April 5—The way in which Canada is winning the long battle against tuberculosis among her Indians and Eskimos was demonstrated today to Governor General Vincent Massey

In a former United States Army Air Force installation, now Clearwater Lake Sanitarium, about twenty miles out of this fur trading center in northwestern Manitoba, Mr. Massey visited 200 tuberculosis patients and heard how the recently intensified drive to wipe out the scourge is beginning to show real results.

OTTAWA, April 6 (AP).—Canada's Governor-General Vincent Massey returned to Ottawa last night after a 10,000-mile aerial tour of the northland including a flight over the North Pole.

He looked fit as he stepped down from his Air Force North Star plane and said of his three-week tour:

"I enjoyed every minute of it."

MASSEY DROPS CANISTER WITH STANDARD AT POLE

Resolute, NWT, March 26—(BUP)—Two canisters lay in the cold and stillness of the world's most northerly point today as testimoney of an historic flight by Governor-General Vincent Massey over the North Pole.

Both were dropped at 1.53 p.m., EST Saturday, one minute after Mr. Massey's North Star aircraft entered the north polar region and swing through all 24 of the world's time zones circling the North Pole.

The main canister was from Mr. Massey. It contained his small, blue standard, and documents commemorating his trip including letters in English, French and Danish, addressed to "the finder." A list of the members of his official party, the aircraft's crew, members of a press party accompanying him, and a copy of their itinerary covering a 17-day, 10,000-mile flight through the far north.

The second contained momentoes of a more informal nature and was filled by eight reporters and cameramen on the flight. It contained notes from them, coins, cigarettes, a sweepstakes ticket on a horse that lost, and a letter from the Governor-General's son and secretary, Lionel Massey, and his wife to Santa Claus on behalf of their three young daughters.

The canisters might be carried by the current to the southern tip of Greenland and picked up within eight to nine months—possibly on the Greenland, Iceland or Norway coasts.

Meanwhile the jaunty and inquisitive Governor-General showed no signs of fatigue despite his 69 years, about 4,000 miles of travel and four busy stop-overs since his trip began in Ottawa last Tuesday. He plunged through his official Resolute visit Sunday proudly bearing his new membership in the "Winged Order of Thalarotos Maritimus," bestowed on him aboard the plane as it circled the Pole after a flight of 1,050 miles from Resolute. The honor is similar to that of membership in Neptune's court bestowed upon ocean voyagers crossing the equator.

Return of Postal Covers From Antarctica Is Delayed

By KENT B. STILES

THE thousands of stamp collectors who sent 280,000 philatelic covers to Antarctica last fall, by courtesy of the United States Navy, with the expectation that they would be canceled there and brought back this spri ., are in for a disappointment.

Processing the four tons of postage down there proved impossible by the time their carrier, the U. S. S. Wyandot, had to start home. Hence, the covers were left at American bases where Navy personnel on the spot are supposed to cancel them in their leisure time, so as to have them ready for return to this country in 1957.

When the Wyandot sailed from Norfolk, Va., last November, with the postal tonnage in her hold, it was hoped that the covers, duly canceled, would be back here this April. But weather conditions in Antarctica and the lack of adequate personnel available to do the work required, persuaded naval people that this mail should be held over. It was simply put off the Wyandot and will be handled, as time allows, at the post offices for Navy personnel remaining there.

Although the Wyandot left Antarctica without the philatelic covers, the ship has wirelessed the Navy that it did bring along such personal mail as had been deposited at the post offices by the expedition's members. Some of this, doubtless, is addressed to collectors. In New Zc 'and, on the voyage home, the Wyandot made calls at Auckland, Wellington and Christchurch. At those points, this mail was taken ashore and sent by air.nail to its destinations. Some of these letters have already been received in the United States.

CARIBOU

FRENCH ANTARCTICA

The first definitive series for France's new colony titled French Antarctica comprises eight bicolored stamps, two being for airmail use. On each item appears the title "Terres Australes et Antarctiques" or The Southern and Antarctic Territory of France. Designs include views of islands which comprise the colony and some of the animal life native to the islands, including sea elephants and penguins. On the 50-francs and 100f are shown ice, penguins and a map with the location of the South Pole thereon.

New Zealand's Tribute To Its Dependency In Antarctica

Official news received confirms a London report and gives more detailed information regarding New Zealand's decision to make that commonwealth's Antarctic terrain, known as Ross Dependency, a stamp-issuing land in its own right.

In 1957 New Zealand will establish post offices in the Ross area, and the promised Ross Dependency stamps will be used exclusively by members of the New Zealand expedition which will participate in the International Geophysical Year (1957-58) penetration of the Antarctic. The postage series will comprise:

Three-pence blue, the Erebus, flagship of Sir John Ross (1800-1862) when he, in 1841, discovered the icebound terrain which bears his name; 4p cardinal, portraits of the explorers Sir Ernest Henry Shackleton (1874-1922) and Robert Falcon Scott (1868-1912) with a background map of Ross Dependency; 8p cardinal and ultramarine, map of the Ross area showing its relationship to New Zealand; and 1-shilling 6p royal purple, portrait of Elizabeth II.

A souvenir cover for use at Ross is being prepared in New Zealand. Collectors desiring this and to arrange for this and other addressed covers should airmail inquiries to: Stamps Division, General Post Office, Wellington. This should be done without delay, as all covers to be forwarded to Ross will leave Wellington about Oct. 1.

Ross Dependency, Ross Sea, Ross Island and some other points in Antarctica were named after Sir James Clark Ross (1800-1862), Scottish Polar explorer who headed four Antarctic expeditions for geographical discovery. It was during one of these penetrations that he found the Ross Area.

Robert Falcon Scott (1868-1912) sounded the Ross Sea on a 1901-04 expedition and reached the South Pole in 1912. With four companions, he perished while attempting to return.

Sir Ernest Henry Shackleton (1874-1922) accompanied Scott on the latter's sledge journey over the Ross Shelf Ice in 1903-04. During a later expedition, Shackleton reached within nearly 100 miles of the South Pole. He died during a subsequent Antarctic voyage.

AN ANTARCTIC POST OFFICE

Australia's Postmaster General C. W. Davidson announced recently that early in 1957 he would establish a post office at Vestfold Hills in the Australian Antarctic Territory. Australia is setting up a research station at Vestfold Hills as part of its activities during the coming International Geophysical Year.

A special postmark will be applied to mail at Vestfold Hills, and mail registration facilities will be provided. Also there will be philatelic service for collectors desiring covers to be posted there. Information as to arrangements for taking advantage of this service may be obtained by addressing Philatelic Bureau, General Post Office, Melbourne C. 1., Victoria, Australia, by Nov. 1.

POLAR GROUP

Increasing scientific and geographical explorations in the Arctic and Antarctic regions have led to the organizing of the American Society of Polar Philatelists, which has become affiliated with the American Polar Society. A publication, "Ice Cap News," has been started, and a "Handbook of Polar Philately" is planned. Neil D. Josephson, secretary, 83 Forest Street, New Britain, Conn., will supply information at collectors' requests.

ANTARCTIC OVERPRINTS — Four low values of the Falkland Islands Dependencies current series—the 1, 2½, 3 and 6 pence—have been overprinted "Trans-Antarctic Expedition 1955-58" in black.

Soviet Opens Polar Post Offices

LONDON, Jan. 18 (AP)—The Moscow radio said today that the Soviet Union could now supply stamp collectors with letters postmarked "The North Pole." The broadcast said the world's most northerly post offices had been set up at two Soviet research stations floating on polar ice islands known as "North Pole IV" and North Pole V."

GREENLAND—Surplus 40-ore and 1-krone "Polar Bear" stamps of 1946 and 1938 have been overprinted 60 ore, the new foreign letter rate.

TELLS OF HER NORTH POLE FLIGHT

Writing of her flight to the North Pole (Polar Times, June 1955, page 27) Miss Louise A Boyd says:

I privately chartered the plane at my own expense, an American DC-4 airplane in New York, U.S.A. The plane was equipped with an extra fuel tank, necessary for my long flight. I went to Norway in a commercial plane ahead of the DC-4 and it met me in Oslo with An American crew of eight — three captains, three navigators, a flight engineer and a radio man, including Thor Solberg, an Arctic flier through whom I obtained the plane and who accompanied me on the flight. At no time did Lieut. Gen. Finn Lambrechts or any Norwegian have anything to do with the flight. Lieut. Gen. Lambrechts and Lt. Col. Stephen Olson were guests on my flight and had nothing to do with the flying at any time.

We started my flight from Oslo the evening of June 16th, flew to Bodoe where we refueled, taking off from there at 1:30 a.m., June 17th, flew over Spitsbergen to the North Pole which we reached at 9:20 a.m., June 17th, circled the North Pole and then back to Bodoe. We were in the air sixteen hours from Bodoe and back to Bodoe, non-stop, and twenty-five hours flying time from Oslo and back to Oslo.

Baffin Bay 800 Miles Long

Baffin Bay between the Atlantic and Arctic oceans is about 800 miles long, with average breadth of 280 miles.

W. C. HAINES DIES; WEATHER EXPERT

Meteorologist Had Been With Byrd on Three Expeditions to North and South Poles

ST. LOUIS, April 8 (AP)—William C. (Cyclone) Haines, colorful weather expert who accompanied Rear Admiral Richard E. Byrd on three Polar expeditions, died last night at Jefferson Barracks Hospital. His age was 69.

Mr. Haines, who retired as assistant meteorologist at the St. Louis Weather Bureau in 1948 after thirty-six years of service, was meteorologist and aerologist on Admiral Byrd's 1926 expedition to the North Pole and the first and second trips to the South Pole in 1928 and 1933.

He received a wrist watch from the Polar explorer, on which was inscribed:

"To my close friend Bill Haines, whose brilliant forecasts enabled us to conquer by air the North and South Poles. Dick Byrd, Dec. 25, 1930."

Admiral Byrd, on one of his expeditions, named a mountain in Little America after Mr. Haines, who received two gold medals from Congress and one from the Navy for taking part in the trips.

Mr. Haines is survived by his widow, a daughter and a son.

Unfailing Good Nature

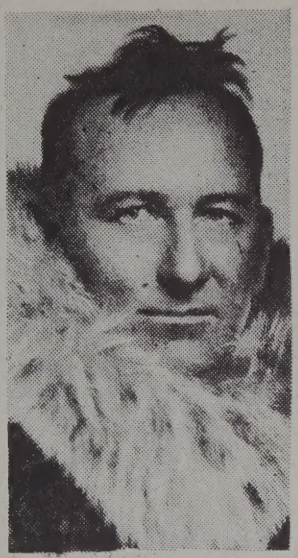
An unfailing good nature and a talent for barbering—in addition to professional skill in predicting the weather—were qualities that made Cyclone Haines a popular as well as a valuable member of the Byrd expeditions.

On the first trip to the Antarctic, he trimmed the hair of the members of the expedition and, on the return trip to New York, "he clips and snips and waggles his shears threateningly under his victims' ears," as the late Russell Owen, New York Times correspondent with the group, described it.

While on the earth's most southern continent, Mr. Haines had double the troubles of a weather man in more populated areas, where long-term records are kept.

On the 1933 trip, for instance, a "warm" spell—the temperature hit a high of 25 degrees above zero—lasted for several days. The forecaster found winds changing and predicted colder weather, but for some reason the thermometer stayed above zero. The unaccountable weather continued for twelve days.

Nonetheless, his batting average was high. Admiral Byrd wrote that Mr. Haines had made a "very great contribution" to the success of the expeditions' flights over the poles.



William C. Haines when he accompanied Admiral Byrd to the South Pole in 1928.

"Had Haines hesitated," the officer wrote in The New York Times in 1930, "in making his decision those flights would have been failures, and possible tragedies, for he selected the only periods where the weather was possible."

Mr. Haines' troubles included hauling down the kites that were used to observe winds aloft. The motors used to reel in the kite wires often froze, and then manpower was sought. No one volunteered, so the weather man said:

"I'm going to be like Tom Sawyer, painting the fence. You fellows are going to think that it's so much fun you'll all be fighting to fly kites."

On the 1933 trip, Mr. Haines was third in command. When Admiral Byrd was stranded at an advanced base, and a relief team headed by the second in command—Dr. Thomas C. Poulter—went for him, Mr. Haines took over for several weeks.

He was a member of the 78 Club, composed of veterans of the Polar expeditions who had crossed the seventy-eighth parallel in the north and in the south with Admiral Byrd.

Officer Saved From Peak Dies Few Hours Later

NOME, Alaska, Jan. 31 (AP)—Alaska's National Guard commander died in a Nome hospital last night a few hours after his rescue from a mountainside. His plane had crashed there Friday with four aboard.

Brig. Gen. John R. Noyes, 54 years old, succumbed to injuries and frostbite suffered in the subzero cold below the Arctic circle.

The West Pointer's three companions, all National Guard officers on an inspection flight with him, survived the ordeal of the crash and the three nights and four days of exposure.

National Guard officers reported all were in good condition today, although one was reported to have suffered severe frostbite. One of the men was rescued from the wreckage with General Noyes. The others were found as they hiked along the tortuous twenty-five-mile route to Nome in search of aid.

Mrs. H. N. Wilcox, Aid to Stefansson

Mrs. Olive Rathburn Wilcox of 225 Sterling Place, Brooklyn, wife of Horace N. Wilcox, head of the Latin Department at Brooklyn Polytechnic Preparatory Country Day School, died on Feb. 5 in Methodist Hospital, Brooklyn. Her age was 60.

Mrs. Wilcox had served since 1920 as secretary to Vilhjalmur stefansson, the explorer. She collaborated with Mr. Stefansson on many of his books, particularly on "Great Adventures and Explorations," which was published here in 1947 and became a best seller.

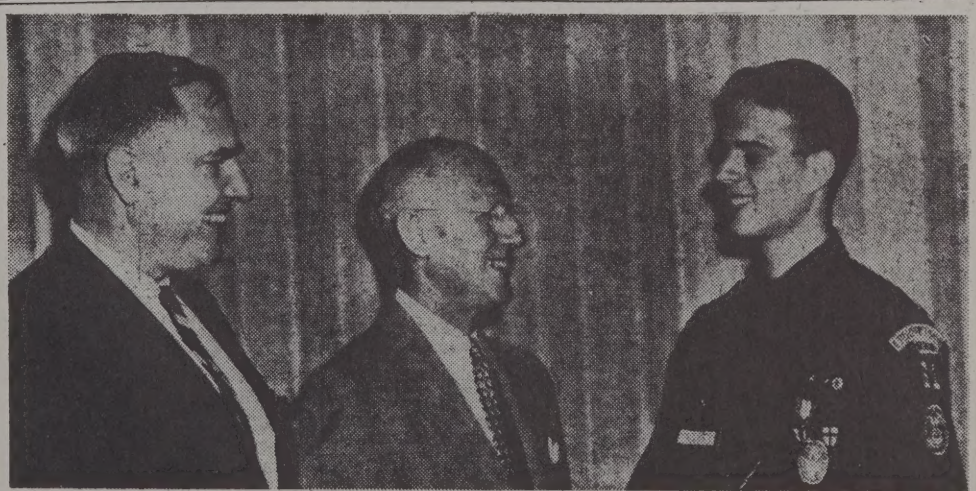
Mrs. Wilcox was born in Kemmerer, Wyo., and was graduated from the University of Wyoming. She was believed to have been the first American woman to enter the desert of central Australia. Mrs. Wilcox belonged to the Society of Women Geographers.

VLADIMIR OBRUCHEV, A SOVIET GEOLOGIST

Vladimir Afanasyevich Obruchev, a leading Soviet geologist and geographer, died June 19 in Moscow, according to the Soviet press. He was 93 years old.

A member of the Soviet Academy of Sciences after 1929, Mr. Obruchev played a key role in the study of the permafrost phenomenon, the permanently frozen subsoil of the northern regions. He received two Stalin Prizes for his work on the geology of Siberia.

He was named president emeritus of the Geographical Society of the U. S. S. R. in 1947.

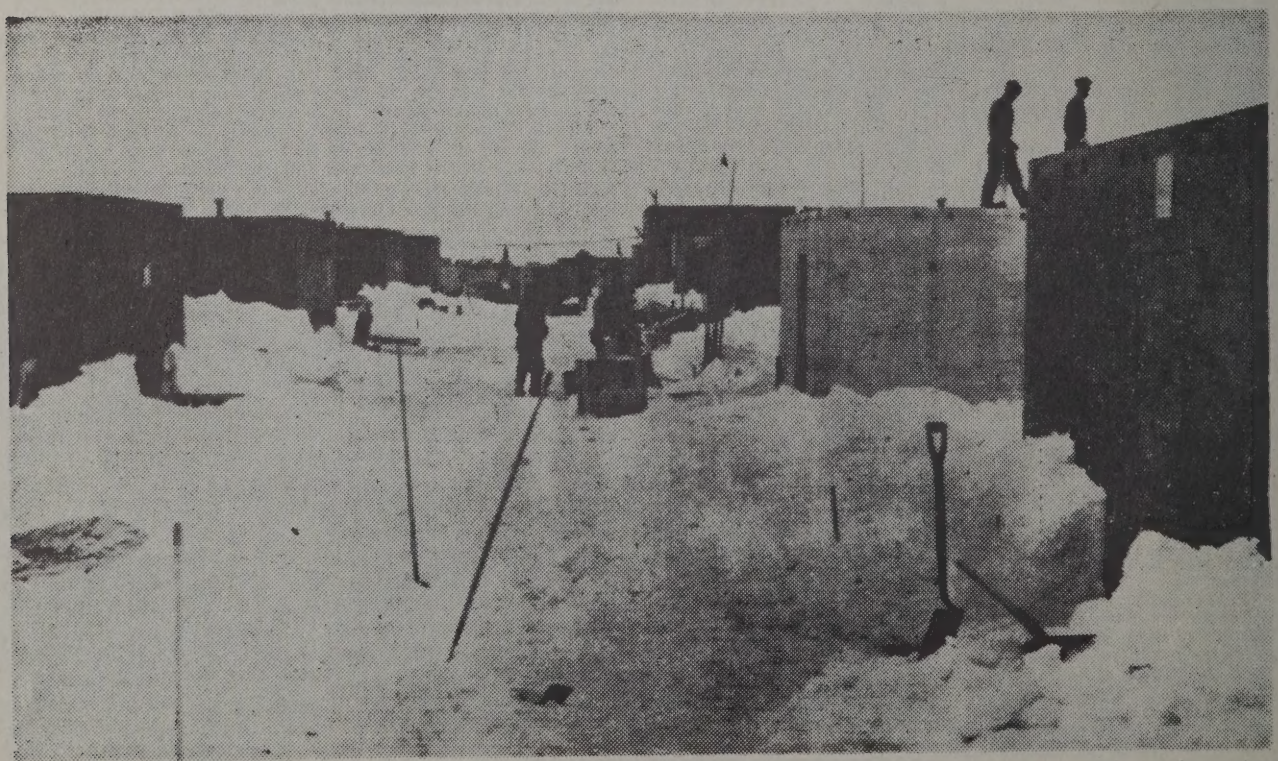


(by Edward Belason)

EAGLE SCOUT BOUND FOR ANTARCTIC: Richard Lee Chappell of Eggertsville, N.Y., a suburb of Buffalo, is greeted by Dr. Arthur A. Schuck (center), chief Scout executive of the Boy Scouts of America, and Dr. Paul Siple, deputy to Rear Admiral Richard E. Byrd, who is the officer in charge of United States Antarctic programs. The Eagle Scout was named a junior scientific aide on the United States International Geophysical Year expedition to the Antarctic, chosen from 250 Explorers, older members of the Boy Scout organization. He is to sail for Little America, Antarctica, this November and will return in the spring of 1958.

FREE WHEELING IN THE ANTARCTIC

McMURDO SOUND.—A reconnaissance team leaves here for a trek across the barren ice with sled runners cutting thin tracks through the drifted snow. Operation Deepfreeze personnel failed to explain the function of the wheel trailing the last sled.—U. S. Navy Photo.



MAIN STREET, LITTLE AMERICA, UNDER CONSTRUCTION

ANTARCTICA.—When completed this chilly thoroughfare will have 19 buildings to house 76 Navy Seabees who'll spend the long winter here. The picture, one of a series of photos by A. P. Staff Writer Saul Pett, just returned from Antarctica, shows Seabees erecting the prefabricated buildings. Little America V, the town, is near Kainan Bay, main base of Operation Deepfreeze.